KENTUCKY CHILD FATALITY REVIEW SYSTEM

2000 Annual Child Fatality Review Report

PREPARED BY:
CABINET FOR HEALTH SERVICES
DEPARTMENT FOR PUBLIC HEALTH
AND
KENTUCKY CHILD FATALITY REVIEW STATE TEAM

November 2001

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Mission Statement

The mission of the state Kentucky Child Fatality Review Team is to provide advice to the Commissioner of the Department for Public Health and facilitate implementation of House Bill 94, which establishes a child fatality review system for the purpose of reducing the number of child fatalities. This mission implements House Bill 94, which established the Child Fatality Review System.

Members
Chairperson
Carolyn Robbins, RN,MSN

Peggy Arvin, RN, BSN
Dept. for Community Based Services
Cabinet for Families and Children

Bob Calhoun , MPH
Program Administrator
Dept. for Public Health

Brenda Caudill-Barnes, Det.
Kentucky State Police

Eileen Closterman, MSW
Dept. for Community Based Services
Cabinet for Families and Children

Tracey Corey-Handy, MD
Chief Medical Examiner
Justice Cabinet

Bill Demrow, President
Kentucky Coroner's Assn.

Joel Griffith, MA
For Community Based Services
Cabinet for Families and Children

Sherry LeGrand, RN
Warren County Health Dept.

Gary Raymer, Chief
Bowling Green Police Dept.

Luke Morgan, JD
Director
Attorney General's Office

Susan Pollack, MD, FAAP
Kentucky Pediatric Society

Tricia Williams
Public Health Programs
Kentucky Injury Prevention
and Research Center

David Jones, Director
State Medical Examiners Office

CONSULTANTS

Kathy Adams, RN
Kentucky Injury Prevention and Research Center

Larry Burnette, Asst. Director
Kentucky Fire Marshal's Office

Crystal Collins
Prevent Child Abuse Kentucky

April Fulcher, Victims Advocate
Bowling Green Police Dept.

Kim Allen, Executive Director
Kentucky Criminal Justice Council

Steve Davis, M.D.
Director, Adult/Child Health
Dept. for Public Health

Mike Cavanah
Consumer Product Safety
Dept. for Public Health

CABINET FOR HEALTH SERVICES

COMMONWEALTH OF KENTUCKY
FRANKFORT, KY 40621-0001

MESSAGE FROM
Commissioner
DEPARTMENT FOR PUBLIC HEALTH

The Division of Adult and Child Health has prepared the 2001 Child Fatality Review Report using data from the Vital Statistics Branch and Coroner Report forms as required by KRS. 211.680. Data, collected during calendar year 2000, has been reviewed by the Child Fatality review team. This report identifies high-risk situations and makes recommendations about how Kentuckians can prevent injuries.

There are numerous references in professional literature to document that *preventable injuries* are a major killer of infants and young children in both Kentucky and the United States. Christoffel & Gallaher report in Injury Prevention and Public Health that 150,000 Americans die and an estimated 70 million more suffer nonfatal injuries every year in the United States.

The report describes the current problems in some detail but it also describes significant gains in the last decade. Deaths due to fires--down, teenage deaths from motor vehicles--down, homicide--down, infant mortality--down, SIDS deaths--down, counties participating in the Fatality Reviews--up, and coroner participation--96%. Kentucky obtained these positive results because many adults have been persistent in studying the problem, turning data into knowledge, and knowledge into positive action to prevent death and illness.

Kentucky state government has taken steps to reduce the morbidity and mortality due to injuries. Fire prevention programs have reduced deaths due to fire. The Early Childhood Development Programs authorized by the General Assembly in 2000 fund voluntary home visitation programs that help new parents prevent injuries in the home and the Healthy Start in Childcare Program enables health professionals to work with childcare facilities to reduce injuries in the childcare setting. In addition, the enhanced support for the Inspector General to work with childcare facilities improves compliance with applicable regulations. Kentucky has achieved other positive results in injury prevention but there is still work to do.

I encourage the reader to note the statistics in this report and to pay particular attention to the recommendations following each section. The members of the Child Fatality Team, its consultants, and the staff from the department who prepared this report have many good ideas for things that will make Kentucky even safer for all of us.

Rice C. Leach, M.D.
Commissioner

EXECUTIVE SUMMARY

The Commonwealth of Kentucky has had a Child Fatality Review system in place since July, 1996. The state team has worked to refine the review process and to encourage the formation of teams at the local level. Kentucky Revised Statute (KRS) 211.684 authorizes the formation of a state team to act in an advisory capacity to local teams, who will investigate child fatalities. The state team provided information to the public about child fatality review, and encouraged the formation of more teams. Child fatality review is not just a data collection process, but a comprehensive study of the causes of child fatality and prevention measures. Localizing this information is important, necessitating the formation of a greater number of teams. Community information about the number of fatalities, causes and possible prevention measures has encouraged the formation of a greater number of teams in local communities. The number of child fatality teams is steadily rising from 32 in 1999 to 59 in 2000.

The State Child Fatality Review Team, with the help of the director of the State Medical Examiner's Office, has begun to participate in the state training of coroners. Sharing information about the program has helped to strengthen the bridge between the local coroners and the state team. The state team is contacting each local health department to request that a designated staff member to be named as the contact for the coroner, in cases of child fatalities.

The state team reviews the Multidisciplinary Guide to Child Fatality Review. The guide is updated to reflect the newest information available for the child fatality review process. Representatives of all of disciplines on the team review their area of expertise and make refinements.

A new informational pamphlet regarding child fatality review was produced and handed out at the annual Coroners' Conference. Members of the state team manned an informational booth at the conference and made a presentation on the process for forming a local child fatality review team.

The state team will reorganize this year, due to the resignation of some of the original members, whose dedication and hard work have contributed significantly to the child fatality review process in Kentucky.

Child fatalities in Kentucky have dropped from 750 in 1995 to 611 in 2000 (data received by Kentucky Vital Statistics as of August 31, 2001). According to data collected from death certificates and coroner report forms the following information is available:

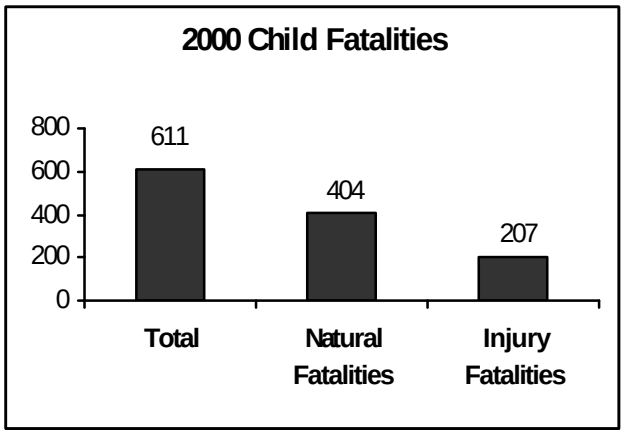
Child Fatalities (N=611)

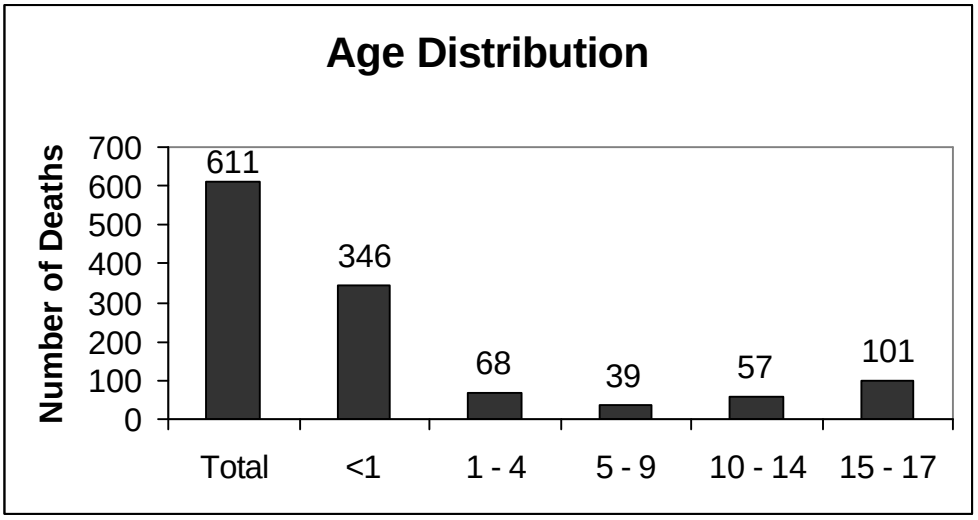
Significant Findings for 2000 include:

- 611 Kentucky Children died

The causes of child fatalities included:

- 404 Natural Cause Fatalities
- 207 Injury Fatalities :
  - 110 Motor Vehicle
  - 21 Homicide
  - 17 Drowning
  - 18 Suffocation
  - 11 Smoke/Fire
  - 30 Other

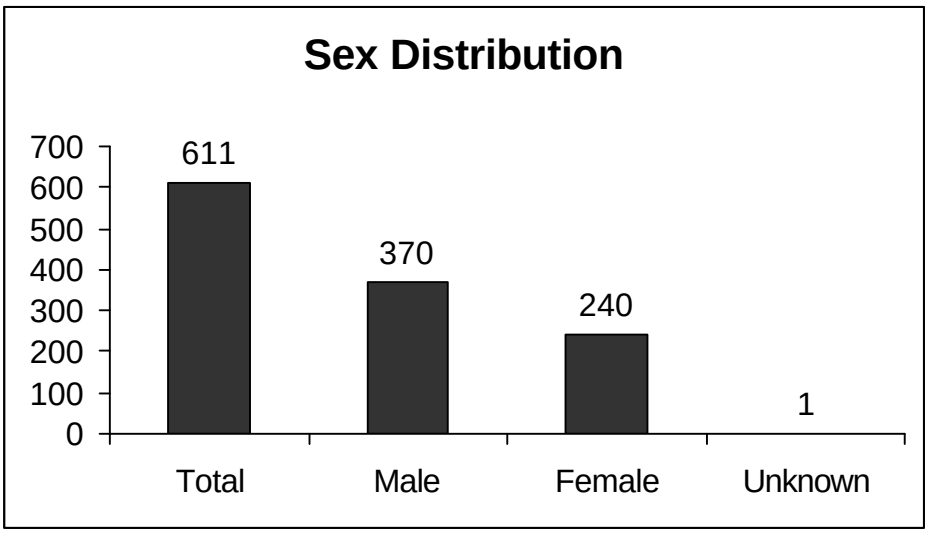


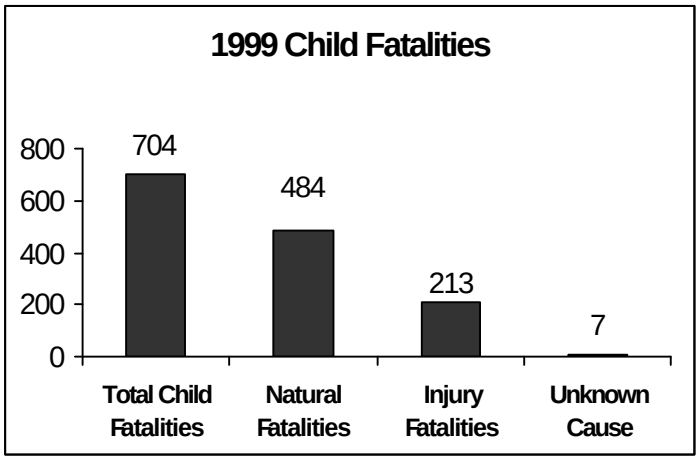


- 346 (56.6%) of child fatalities were children under 1 year of age.
- 101 (16.5%) were teens between the ages of 15 and 17.

These two age groups account for 447 (73.1%).

- Six hundred eleven children under the age of 18 died in Kentucky in 2000.
- Three hundred seventy (60.5%) were males
- Two hundred forty (39.2%) were female
- One child's sex was not identified.





This compares to the following 1999 data:

- 704 Kentucky Children died

The causes of child fatalities included

- 7 Unknown Causes
- 484 Natural cause fatalities
- 213 Injury fatalities including:
  - 108 Motor Vehicle
  - 19 Homicide
  - 16 Drowning
  - 19 Suffocation
  - 17 Smoke/Fire

Incidents of Sudden Infant Death Syndrome (SIDS) have declined from 99 in 1989 to 34 in 2000, as reported by Vital Statistics as of August 31, 2001. Education through the Governor's Early Childhood Development Initiatives, addressing 'Back to Sleep' along with health education in prenatal programs has had a direct effect. Healthy Start/Childcare consultants and the Health Access and Nurturing Development Systems (HANDS) program staff provide training on the "Back to Sleep" program in homes and childcare settings throughout the state.

This report provides statistical data from the Commonwealth of Kentucky that can be shared with local community leaders to encourage the formation of Child Fatality Review Teams. To meet the publishing deadline, the cut off date for data collection is August 31, 2001 for this report. The focus is the provision of a comprehensive review of child fatalities and the communities response to the event. This review increases the community understanding of the nature and scope of the child's death and the prevention measures.

The State Advisory Team found the number of child fatalities under the age of 18 to be declining. There are significant improvements in some areas of child morbidity and mortality in 2000. Ninety three fewer children died. There were eighty fewer deaths due to natural causes, one less suffocation and six fewer smoke/fire deaths. Although unintentional injury rates have declined about 40% in the past two decades, injuries still remain the leading cause of death among children and adolescents ages 1-19. Nationally, injury claims more children's lives each year than any disease. The number of motor vehicle accidents, the most prevalent killer of young children in Kentucky and the United States increased again for 2000. In 1999, 108 Kentucky children died in motor vehicle accidents and in 2000, 110 died.

The State Advisory Team reviews the local community response to child fatalities and possible prevention initiatives. The state team reviews the information with the goal of sharing the most effective measures with the rest of the state. What is effective in one community may not be successful in another, but sharing information about success or failure can benefit all community efforts. The state team has done a good job of encouraging coroner participation in these reviews. The percent of coroners submitting coroner report forms, has risen from 42.9% in 1997 to 95.8 % for 2000.

This report:

- Provides an overview of causes of all deaths in the Commonwealth
- Gives specific numbers of the major causes of fatalities of children
- Addresses best practices to prevent future fatalities.
- Summarizes Kentucky mortality data related to the causes of deaths.
- Makes recommendations to improve the child fatality review process.
- Encourages the formation of a greater number of local child fatality review teams.

INTRODUCTION

Kentucky places major emphasis on improving the lives of children living in the Commonwealth. Injury prevention and health promotion activities are the foundation of a successful public health policy aimed toward the most fragile members of society. The governor's early intervention program, KIDS NOW, makes injury prevention education available to parents and childcare workers in an effort to touch every aspect of a childs' life. For this report and the Child Fatality Review process "child" is defined as an individual that is between birth and 18 years of age.

Healthy Kentuckians 2010 states that between 1993 and 1997, an average of 2,437 deaths per year in Kentucky were due to injuries. These injuries resulted from a variety of causes such as motor vehicle crashes, firearms, suicide, homicide, poisoning, falls, fires and drownings. The goal of injury prevention in Healthy Kentuckians 2010 is to reduce the incidence and severity of injuries from unintentional causes, as well as death and disabilities due to violence.

Injuries are predictable and preventable. The cost of unintentional injuries to society is staggering; the cost of injury prevention is minimal. Costs cited in The Future of Children, Volume 10 number 1, provide the following examples:

- Every child safety seat saves this country $85 in direct medical costs and an additional $1,275 in other costs to society.
- Every bicycle helmet saves this country $395 in direct medical costs and other costs to society.
- Every smoke detector saves this country $35 in direct medical costs and an additional $865 in other costs to society.
- Every dollar spent on poison control centers saves this country $6.50 in medical costs.

The ultimate goal of the child fatality review process is to save lives. Additionally, these statistics clearly indicate the monetary value of injury prevention.

Local Child Fatality Review Teams

DEFINITION:

A local child fatality review team is defined by KRS 211.684 as a community team composed of representatives of multiple agencies, offices and institutions that investigate child deaths, including but not limited to coroners, family service workers, medical professionals, law enforcement officials, and prosecutors. Teams may be called response, review or investigation teams.

Kentucky Law (KRS 72.025) requires coroner investigations and post-mortem examinations when death appears to be caused by the following circumstances:

1. Homicide or suspected homicide
2. Suicide or suspected suicide
3. Drug overdose or poisoning
4. Motor vehicle collision, or body found on or near roadway or railroad
5. In police custody, jail or penal institution
6. Mental institution and no history to explain death
7. Fire or explosion
8. Child abuse
9. Accidental death
10. Skeletal remains are found
11. Decomposed human corpse
12. Drowning
13. Sudden Infant Death Syndrome is suspected
14. State owned or leased institution or facility
15. Death occurring at the work site
16. Under age 40 and no medical history
17. Sudden unexplained death
18. Deaths unattended by a physician and no medical history
19. Body to be cremated, all cremations must be authorized by the coroner's office

It is critical for team members to discuss and understand the roles and responsibilities of individuals and their agencies to assure that comprehensive information is gathered, investigations and interviews of one agency do not hinder those of another, evidence is not destroyed or missed, and duplication and fragmentation is avoided.

Core members of the local team or multi-county team will include the coroner and representatives of the local Department for Community Based Services office, law enforcement agencies, and the local health department. Other agencies to be considered include the prosecutors, physicians, mental health professionals, emergency medical personnel and others with and interest inn the specific case or in child death prevention.

KRS 211.680 allows for a state child fatality review system and multidisciplinary review of obvious injuries and child fatalities (coroner cases). The law mandates the following:

The Coroner Shall:

Contact local Department for Community Based Services
Contact law enforcement with local jurisdiction
Contact local health departments
to determine the existence of relevant information concerning the case

The Coroner Shall

Submit monthly reports to the Department for Public Health of all coroner reported child fatalities

The Department for Public Health Shall:

Produce an annual report

Child Fatality Review In Kentucky

Betty Spivack, M.D. is a Forensic Pediatrician, working for the Justice Cabinet in the State Medical Examiner's Office. She wrote the following section of the Child Fatality Review. "What is it and what we are doing in Kentucky" is contributed by Dr. Spivack who has joined the State Child Fatality Review Team and has shared her expertise with many communities in the Commonwealth. Dr. Spivack's contribution to this report is appreciated as is the knowledge and caring she is providing for the children of Kentucky.

Child Fatality Review: What is it and what are we doing in Kentucky?

Betty Spivack MD

The modern child fatality review process began in 1978 when a California child psychiatrist, Dr. Michael Durfee, grew frustrated with the disorganized response to unexpected infant and child death. A multidisciplinary team was brought together under the auspices of the Inter-Agency Council on Child Abuse and Neglect (ICAN); during their reviews they discovered many abuse and neglect deaths which had been missed. Through the efforts of Dr. Durfee and many others, child death review panels have spread across the country.

In 1995, the U.S. Advisory Board on Child Abuse and Neglect issued a report on fatal abuse and neglect, *A Nation's Shame: Fatal Child Abuse and Neglect in the United States* (available through the U.S. Department of Health and Human Services). This report presented a chilling view of the scope of child maltreatment fatalities, as well as the lack of uniform or coordinated response to child death investigation across the country. They explicitly recommended that state and local child fatality review panels be established in each of the fifty states as part of a coordinated response addressing education, prevention, family services and preservation, investigation and law enforcement. Establishment of review teams has become a part of the Healthy Child 2000 goals established by the U.S. Center for Disease Control (CDC). The CDC has also issued guidelines for scene investigations in cases of sudden, unexpected, infant death.

Child fatality review teams work in several ways to achieve a variety of goals.

Local teams typically consist of representatives of local health departments, physicians, law enforcement, child protection, coroner and/or medical examiners, and prosecutors. They may meet periodically, or may be called together at the time of a child death. Generally, the goal of local teams is to pool information available to the various agencies, so that the cause of death can be reasonably and reliably reviewed and tabulated. Local teams are also interested in possibilities of death prevention, and may use local deaths to help target public service campaigns, such as use of car seats or bike helmets. The idea is not to replace the coroner or medical examiner, but rather to assist them by providing a convenient and confidential forum for sharing information.

In some regions, such as New York City, local panels only review deaths in families known to the child protection agency. In this case, the purpose of review is to evaluate the performance of the agency. This is an important task, but it avoids the crucial issue of identification of abuse or neglect in cases not known to child protection.

State team generally include high ranking administrators from departments of public health, child protection, law enforcement, medicine, coroner and/or medical examiners and prosecution. State wide panels are typically more interested in statistical information which can indicate whether statewide initiatives in childhood health and child protection are effective. Except in small states, such as Rhode Island, state level teams rarely review individual fatalities in a systematic manner. However, some states, such as Connecticut, have used reviews of children who have died while receiving state services for children in juvenile detention and correctional facilities, and use of physical restraint in psychiatric facilities.

In 1992, Missouri became the first state to establish a fully integrated, realtime, sytem of child fatality review. Since 1993, data has been recorded on every child death in the state. Every county was required to establish a child fatality review panel, which must convene within 3 days of a wide variety of unexpected child deaths. Data from these reviews is also sent to the state panel. Standards were set for conduct of child autopsy examinations. The results have been astounding; 35% of child deaths meet standards for review, and review panels have identified 84% more cases of child deaths from abuse and neglect than were identified by traditional means in 1989.

Here in Kentucky, a state team was established by the legislature in 1996 under KRS 211.680 to 211.686. This law required coroners to notify county child protection and health departments whenever a child died unexpectedly. Coroners must also complete a database report for the state panel. By requiring multi-agency notification of child deaths, this legislation has supported establishment of local child fatality review panels. Currently, 59 of Kentucky's 120 counties have local panels. Over the past 5 years, we have made substantial progress in understanding and preventing child deaths. We hope to see the progress continue.

How well is Child Fatality Review working in Kentucky?

The system is a dynamic process that is constantly improving, as manifested by the increased participation of 59 counties in 2000, up from 32 in 1999. As DPH provides education to more Kentucky counties the interest grows. Members of the state team have had the unique opportunity to participate in the coroner training sessions. Thanks to David Jones, Director of the State Medical Examiner's Office, members of the state child fatality review team have been able to review this process with coroners. This has been a great help because it has increased the understanding of team members, lead to changes to the report form and removed the barriers of working with unknown team players. These sessions have made it possible for members of the team to share the reason for the child fatality review process and how it helps local communities to develop prevention measures.

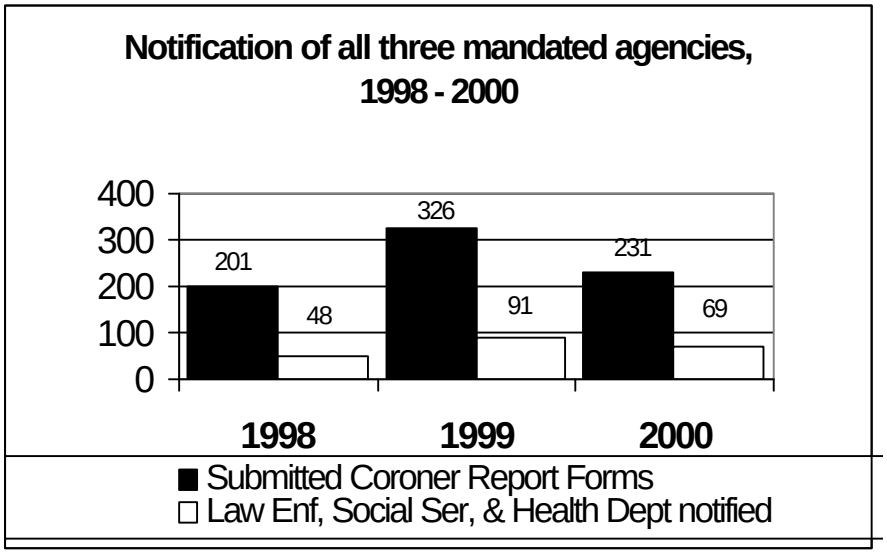
With almost half of Kentucky counties having functioning child fatality review teams we have made good progress. One of the goals of the state team for next year is to add more teams and within the next five years to have every Kentucky county participating in the process. While this goal may seem lofty, it will make Kentucky a safer place for everyone. The increase of 27 teams in 2000 surpassed last year's expectation and makes the 120 county goal seem attainable.

The following charts indicate that agencies with the responsibility of providing services to the children of Kentucky are not being contacted in most cases of child fatality. These agencies are to be notified by the coroner to find out if services have previously been provided to this child or the family, and to determine if the services may be pertinent to a case review of the fatality. These numbers are shared with the local communities. The state team encourages this participation and information by educating the public about the importance of the process.

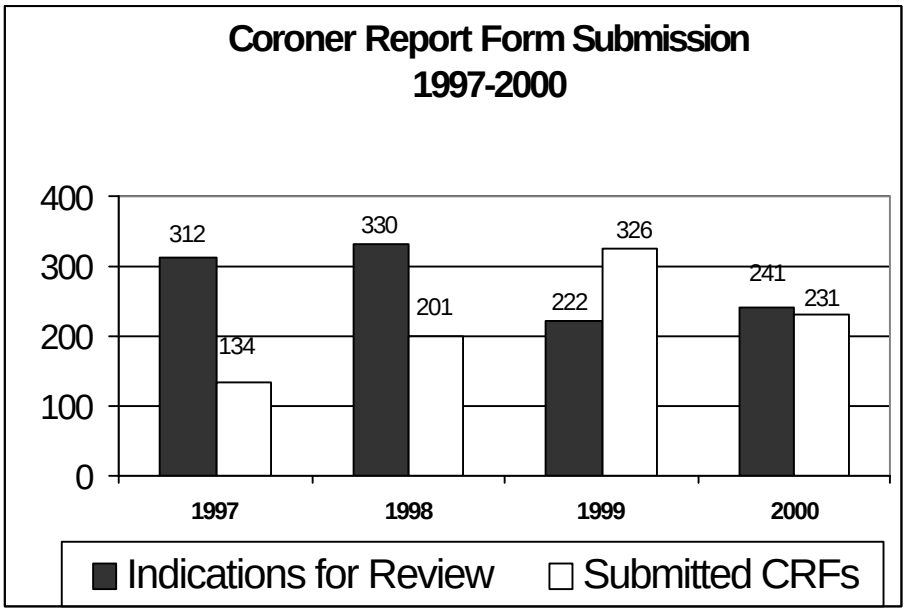
The percent of coroners submitting coroner report forms, has risen from 42.9% in 1997 to 95.8% for 2000. The state team has done a good job of encouraging participation. However, the percentage of coroners contacting all three agencies, as mandated, has remained consistently below the 30%, 23.8% in 1998 and 29.8% in 2000.

This will be an area of focus for the current year. Encouraging this participation in the system, and reminding coroners of the law will help make the system function more efficiently.

Number of CFR cases reviewed by CFR teams



- Sixty nine (29.8%) of all coroner cases were reported to three agencies as mandated in 2000.
- Ninety one (27.9%) contacted all three agencies in 1999.
- Forty eight (23.8%) contacted all three agencies in 1998



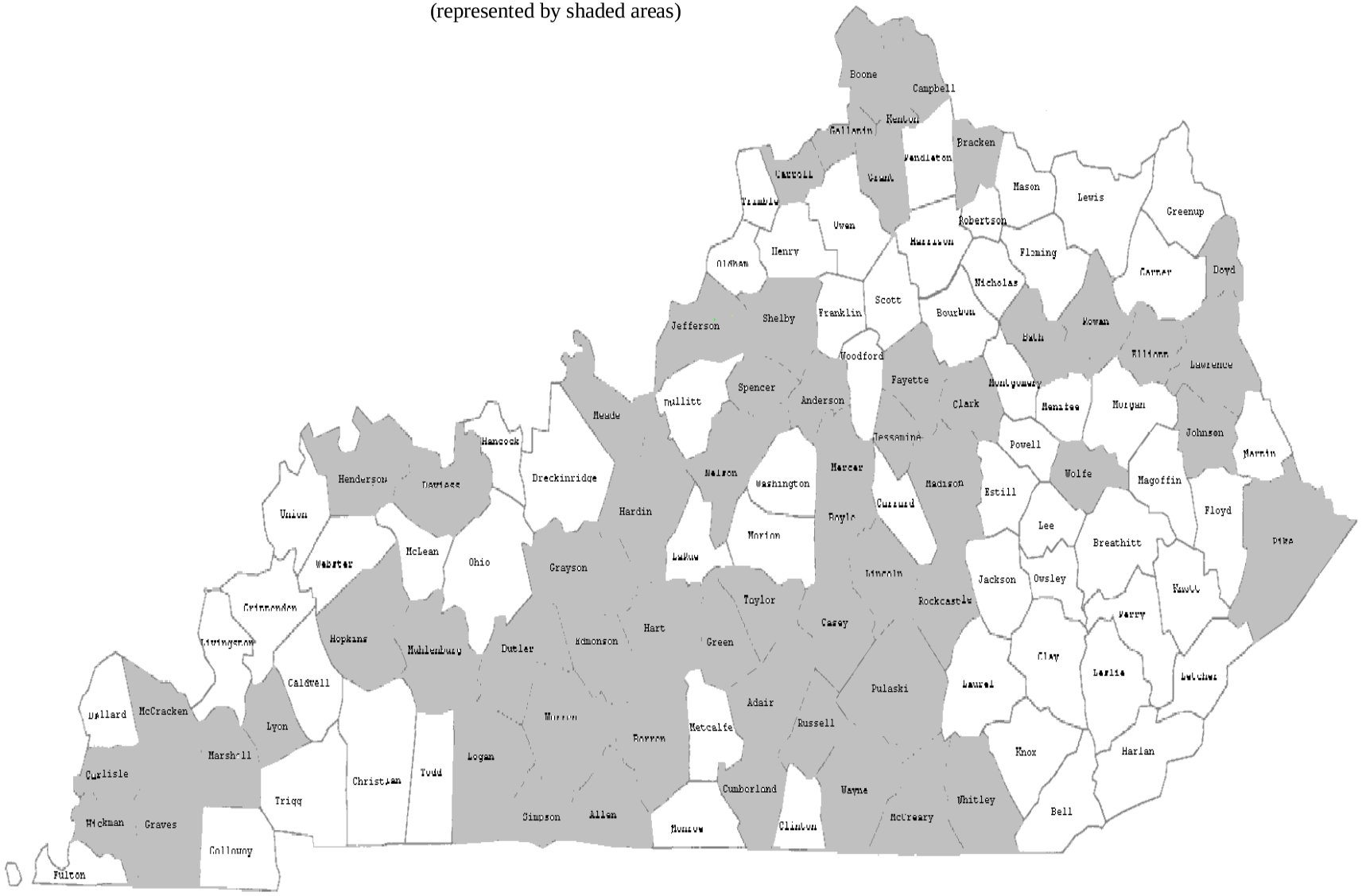
- Two hundred thirty one (95.8%) coroner cases had coroner report forms submitted in 2000 to DPH.
- Three hundred twenty six Coroner Report forms were submitted in 1999. (Some of which were not appropriate for child fatality review).
- In 1998 CFR forms were completed on 201 (60.9%) of required cases.
- One hundred thirty four cases (42.9%) had CFR forms completed in 1997.

Kentucky Counties with Child Fatality Review Teams as of July 2001 (N=59)
This is an increase from 1999 when there were only 32 child fatality review teams in Kentucky.

Allen	Carroll	Green	Logan	Rockcastle
Adair	Casey	Hardin	Lyon	Rowan
Anderson	Clark	Hart	Madison	Russell
Barren	Cumberland	Henderson	Marshall	Shelby
Bath	Daviess	Hickman	McCracken	Simpson
Boone	Edmonson	Hopkins	McCreary	Spencer
Boyd	Elliott	Jefferson	Meade	Taylor
Boyle	Fayette	Jessamine	Mercer	Warren
Bracken	Gallatin	Johnson	Muhlenberg	Wayne
Butler	Grant	Kenton	Nelson	Whitley
Campbell	Graves	Lawrence	Pike	Wolfe
Carlisle	Grayson	Lincoln	Pulaski	

Kentucky Counties with Child Fatality Review Teams as of August, 2001

(represented by shaded areas)



Injury Related Child Fatalities

Childhood Fatalities Due to Injury

According to the Morbidity and Mortality Weekly Report 1985-1995, since 1950, child mortality among children under 15 years of age declined significantly. Nearly all of the decline reflects a reduction in the rate of deaths from natural causes. Injury has emerged as the leading cause of death among children 1-14 years of age. Injuries cause more deaths in the United States than disease. Because of this, injury deaths command a comprehensive program to inform the public of the threat to children. Telling parents that the overwhelming threat to the health and safety of their children is no longer disease, but injury, can change the way parents address this issue with their children. This will encourage parents to begin early to discuss safety.

As we focus attention on the health and developmental needs of young children, we must not forget that adolescence is another critical period. Lifetime health habits, both positive and negative, are formed during the teenage years. The groundwork is laid for the health of the next generation. While most adolescents are generally healthy, significant health threats remain.

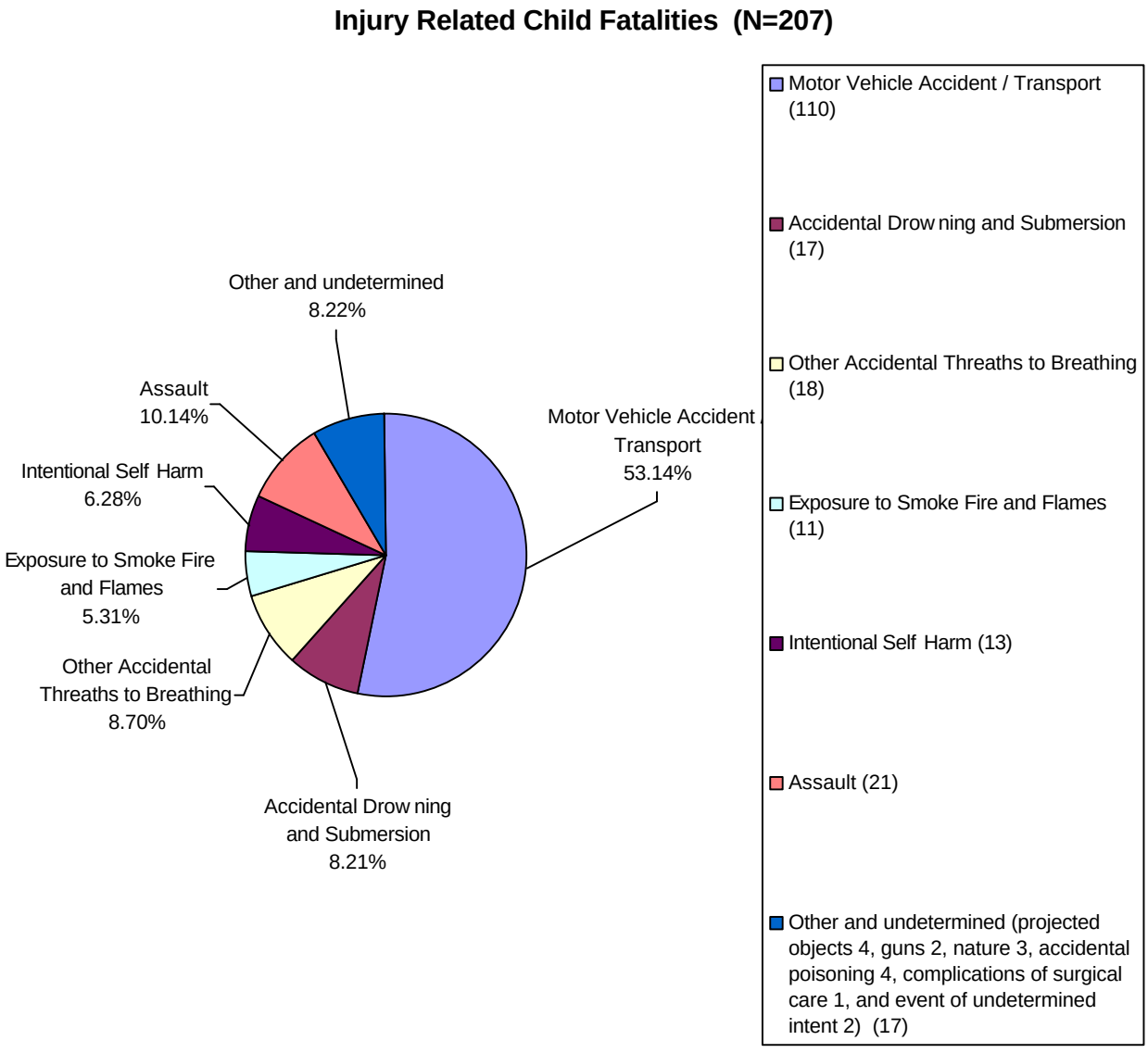
The National Institute for Occupational Safety and Health (NIOSH) and The Center for Disease Control (CDC) ask the following question about unintentional injury fatalities of children in the United States. "Are there specific education measures that can be taken to reduce the number of unintentional injuries to children?" A publication addressing childhood accidents from the CDC states that age appropriate activities for children can reduce the risk of unintentional injuries. By understanding the stages of a child's growth and development and by providing careful supervision and training that is right for each stage of a child's life, parents and other care givers can protect children.

One example of an inappropriate age activity is children, too young to drive both physically and emotionally, driving ATVs and farm machinery. If parents understand the limitation both physically and emotionally of children, they can take precautions. Teenagers, on the other hand, may be mentally equipped to understand that risky behavior often has unpleasant consequences, however, they are often driven to ignore common sense to satisfy the emotional need for experimentation that is typical for the age.

Health indicator statistics from the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA) are used to indicate the impact that these threats have on the lives of the children of the Commonwealth. The statistics paint a picture of continued progress in improving the lives of our children, but there is still a long way to go to achieve the goal of allowing every child to live a healthier, happier life.

Figure 1: All Injury Related Child Fatalities for 2000
By Cause

- More than half of all unintentional child fatalities involved a motor vehicle N=110 (53.14%).
- Assault was the next major cause of unintentional child fatalities N=21 (10.14%)



Unintentional Injury In Kentucky (UI)

Causes

Motor Vehicle Fatalities

This section of the report was created with the assistance of Susan Pollack, MD. Dr. Pollack is employed by the Kentucky Injury Prevention and Research Center at the University of Kentucky. Dr. Pollack has served on the Kentucky State Child Fatality Review Team since it's inception in 1996. The Department for Public Health wishes to express gratitude to Dr. Pollack, on the behalf of the children of the Commonwealth, for all of the dedication and sincere concern that she has shown for the safety and well being of our children.

Motor Vehicle Fatalities

According to death certificate data the leading cause of fatal injuries to children less than 18 years of age in Kentucky in 2000 was motor vehicle crashes. Two hundred seven children died from all types of injuries in 2000. One hundred and seventy three children died from unintentional injuries, down from 181 in 1999. One hundred and ten of those fatalities involved a motor vehicle, up from 108 in 1999. In 1999, motor vehicle fatalities accounted for 50% of all injury deaths, in 2000 that percentage is 53%.

How best to address this issue is a major health concern in Kentucky. Child passenger safety crosses the territorial boundaries of agencies, state and local governments and law enforcement. Anyone interested in the safety and well-being of children in their community must recognize that the automobile is the biggest killer of young Americans, killing more individuals and causing more life altering injuries than disease.

Statistics from Kentucky Traffic Accidents Facts, 2000, compiled for the Kentucky State Police by the Transportation Center at the University of Kentucky College of Engineering show there were 135,079 motor vehicle crashes (MVC) in 2000. This number represents an increases of 2.2% from 1999. These data also indicate that teen drivers account for 6% of the driving population in Kentucky but account for 22% of injury MVC's, and 17% of fatal MVC's. These data show the over representation of teenage drivers both in the total number of MVC's and the number of fatal MVC's. Using National Safety Council estimates, the cost of all accidents to Kentucky is somewhere between 1.9 and 5.3 billion dollars.

In an effort to save lives and reduce traffic-related deaths and injuries on our roadways, the Governor's Highway Safety Program has launched the "**Click It or Ticket"** Campaign. Through this initiative, state, county, and municipal law enforcement agencies aggressively enforce Kentucky's traffic safety laws with special emphasis on occupant protection. Data from the individual sites were combined into a statewide percentage considering function classification, geographic region, and vehicle miles traveled.

The Click It or Ticket data show that the seat belt and child protective device usage rate increase found in 1999, continues in 2001. The usage rate for front seat occupants was 62 percent in 2001, compared to 60 percent in 2000, 59 percent in 1999, 54 percent in 1998, 1997 and 1995, 55 percent in 1996, and 58 percent in 1994. The current usage is substantially above the 1993 level, prior to enactment of the statewide law, of 42 percent. The usage rate at a mini-sample of 21 locations was 63 percent compared to a high of 70 percent which was found during the enforcement period of the Click It or Ticket campaign.

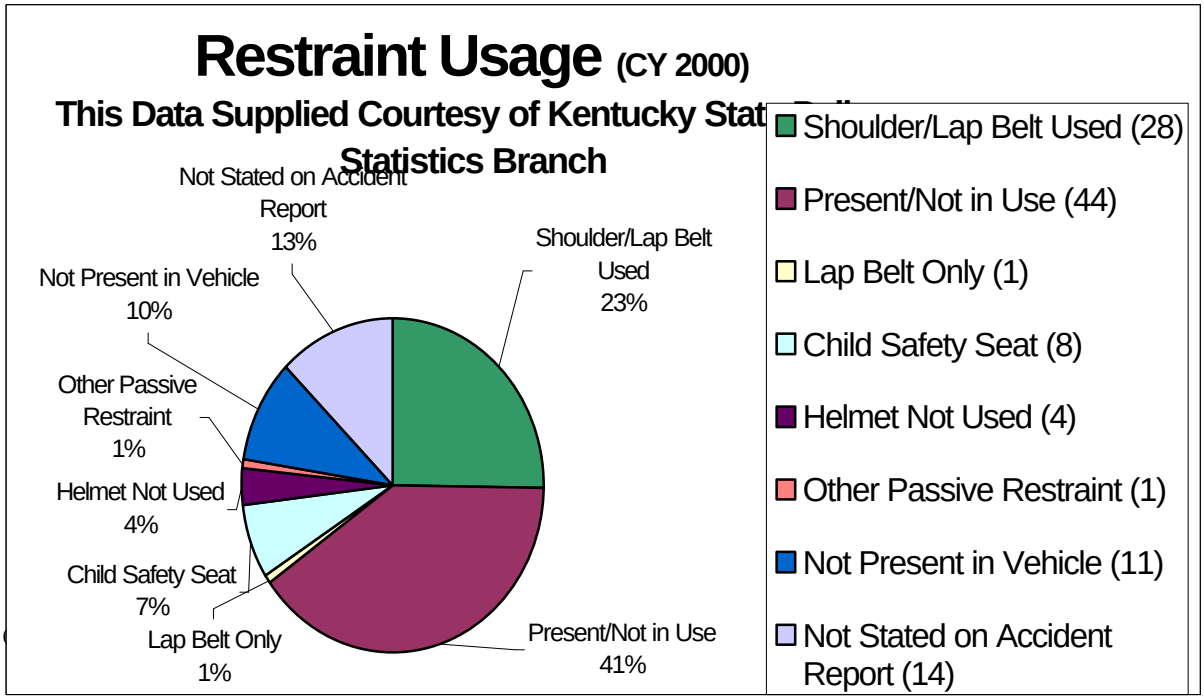
The 2001 statewide usage rate for children under the age of four was determined to be 89 percent. The statewide law, involves secondary enforcement. The higher rate for children could partially be related to primary enforcement. The child fatality team recommends that the current law be modified to allow primary, rather than secondary enforcement for all vehicle occupants, to obtain the maximum possible increase in usage. The potential increase, which can result from an emphasis on enforcement, was shown by the results of the

Click It or Ticket campaign. At a minimum, primary enforcement should apply to drivers while they are in the permit and intermediate phase of the graduated license program.

These are some of the facts the team wishes the public to know.

- Traffic-related injuries are the leading cause of all injuries in America.
- Every hour in America someone dies simply because they didn't take the time to buckle up.
- Traffic-related injuries are the leading cause of death for children and adolescents above age one.
- Wearing seat belts is the most effective means of reducing traffic fatalities and serious injuries in traffic crashes.
- If Kentucky's present seat belt usage rate increased by 10%, an estimated 50 lives would be saved and 963 serious injuries prevented yearly. This represents an economic savings of nearly $70 million to the Commonwealth. The usage rate increased in 1999, as stated earlier.
- Motor vehicle crashes cost society $150.5 billion every year, including $17 billion in health care costs.
- Buckling up is required by Kentucky law.

Restraint Usage Motor Vehicle Fatalities (N=111)



Kentucky's
Seat Belt Law

As stated by KRS 189.125, effective July 15, 1994, requirements for seat belts and child restraints systems: No person shall operate a motor vehicle manufactured after 1965 on the public roadways of this state unless the driver and all passengers are wearing properly adjusted and fastened seat belts. The driver is responsible for assuring that he and all passengers in the vehicle are properly restrained.

According to Kentucky State Police:

Failure to wear a seal belt is a secondary violation. A uniform citation for a seat belt may be issued only if an officer has cause to stop the person for reasons other than a violation of the seat belt law.

Any person who violates the provisions of Kentucky's Seat Belt Law shall be fined an amount not to exceed twenty-five dollars ($25).

If you are among the Kentuckians who don't regularly buckle up or buckle up your children, remember, you should start to **Click It,** or you will get a **Ticket.**

There will be **ZERO TOLERANCE** for those who fail to restrain their child passengers or are found to not be wearing their seat belts as a secondary violation.

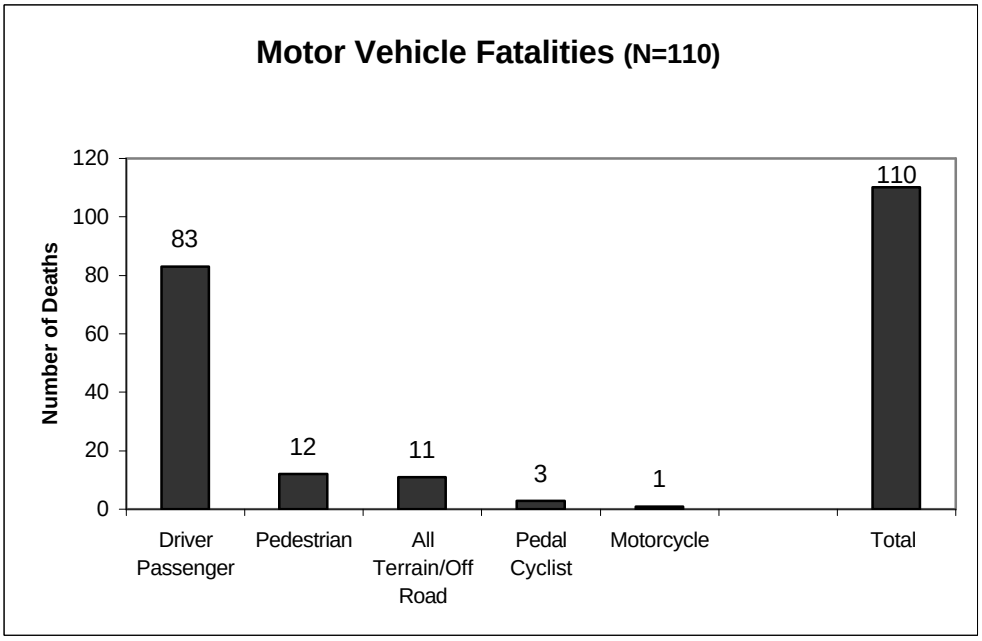
Kentucky's Child
Restraint Law

KRS 189.125 also requires: Any driver of a motor vehicle, when transporting a child of forty (40) inches in height or less in a motor vehicle operated on the roadway, streets, or highways of this state, shall have the child properly secured in a child restraint system of a type meeting federal motor vehicle safety standards.

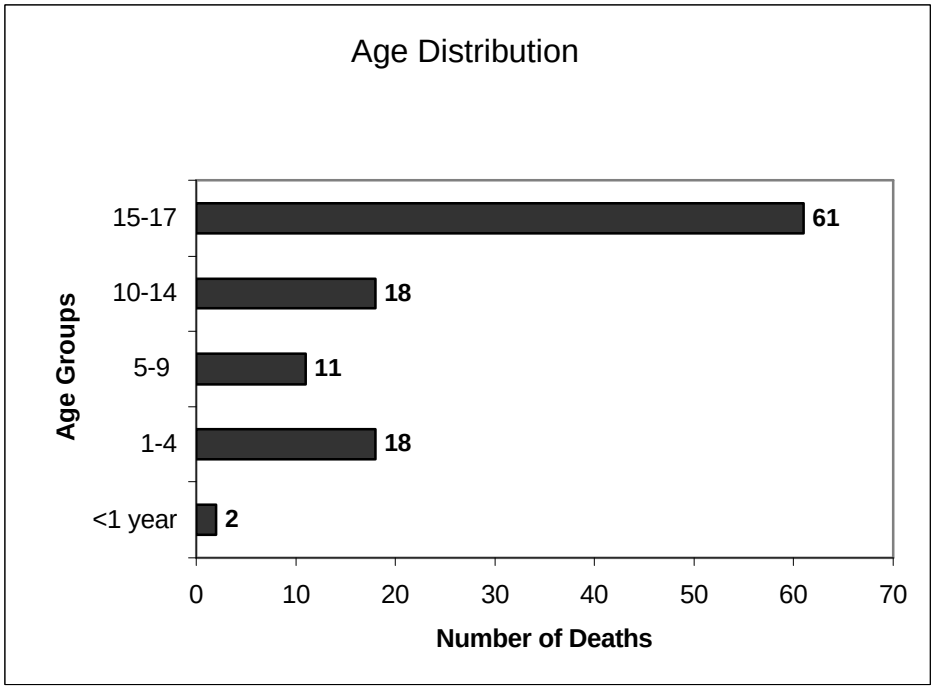
According to Kentucky State Police:

Any person who violates the provisions of Kentucky's Child Restraint Law shall be fined fifty dollars ($50) and shall pay an additional fee of ten dollars ($10) which shall be deposited in the Traumatic Brain Injury Trust Fund.

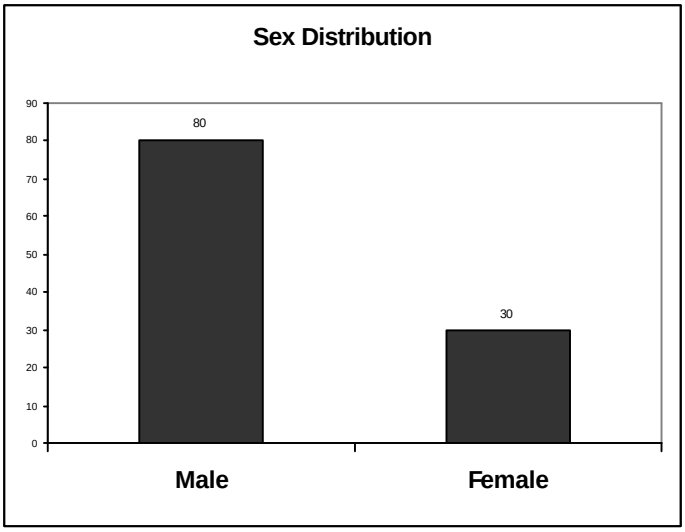
Motor Vehicle Fatalities (N=110)



- Eighty– three (75.4%) motor vehicle crashes were fatal for the driver or passenger.
- Twelve (10.9%) motor vehicle crashes were fatal for a pedestrian.
- Eleven (10%) were fatal ATV crashes.
- Four fatalities were cyclist, 1 motorcycle and 3 pedal.



- Sixty-one (55.4%) MVC child fatalities were teens ages 15-17.
- Two age groups 10-14 and 1-4 each had 18 (16%) of MVC fatalities
- Eleven (10%)of MVC fatalities were 5-9 yrs. old.
- Two (1.8%) Fatalities were <1 yr.



- Eighty (72.7%) of all motor vehicle fatalities were males.
- While only 30 (27.2%) were females.

Comments by the Team:

Motor Vehicle Accidents are the number one cause of death for children ages 1-4. This needs to be a consideration for defining the roles of education, law enforcement and engineering in child restraint systems.

The current Kentucky child passenger safety law does not adequately reflect injury/fatality data. It does not provide sufficient protection for the safety of children because it fails to address the use of booster seats for children over 40 inches tall, does not allow police to stop offenders unless another violation has been committed, does not address the education of parents by certified child safety seat technicians and does not establish fixed car seat fitting stations.

Data on factors specific to Kentucky, including the lack of car inspection programs, needs to be collected and compared to measure the success of current prevention programs and assist in the development of additional prevention programs.

Graduated Drivers Licensing GDL has shown potential in reducing the number of crash-related fatalities in the teen driving population. The increase in crash rates immediately after full licensing suggests that additional changes are needed to provide a more enduring protection effort. Following is information provided by the Kentucky Transportation Center, University of Kentucky College of Engineering.

The Impact on Teen Driver Crashes

Researchers at the Kentucky Transportation Center and Kentucky Injury Prevention and Research Center have examined teen crash data for three years (1993-1995) before and four years (1997-2000) after Kentucky enacted its teen licensing program. Results indicate a 31% reduction in crashes for 16-year-old drivers after the program, and a similar reduction in fatal crashes (31%) and injury crashes (33%). This reduction is due to the 83% decease in crashes for drivers age 16 to 16 1/2. Cost analysis indicates an estimated reduction of $36 million per year in 16-year-old teen driver crash-related expenses.

Unfortunately, there have been no decreases in the number of crashes or traffic violations for drivers past the learner permit level (which requires adult supervision). The rate of crashes per miles driven by 16-year-olds with a license is about three times higher than for Kentucky 16-year-olds with a permit. Therefore, although Kentucky's program has saved lives, reduced injuries and reduced crash costs for permit age drivers, there is no current evidence that Kentucky's GDL program has sufficiently addressed the teen crash problem for drivers past the permit license phase. Results from this study indicate a need for additional measures to decrease crashes in the 16 1/2 to 18-year-old age group.

High Risk Driving for 16 and 17-year-olds

For drivers over age 16 1/2, the current program has failed to address higher risk situations; it has not reduced fatal crashes during night time hours, has not reduced crashes when teen passengers are in the vehicle and has not affected safety restraint use.

The current night time driving restriction during the permit level does not include the hours nor the ages when higher number of crashes occur in Kentucky. An alarming 24% of fatal crashes involving 16-year-old drivers occurred from 9PM to midnight, the hours before the driving restriction starts. In addition, young Kentucky drivers have an increased chance of causing a single-vehicle accident when driving with peers. Nationally, the driver death rate for 16 and 17-year-olds is more than two and one-half times higher between 10PM and midnight than during daytime hours without passengers. The risk is even higher after midnight. The death rate for drivers in this age group increases with the number of passengers.

Recommendations:

1. Amend the child passenger safety law to require that children are restrained in booster seats after they outgrow car seats.
2. Implement a primary seat belt law, permitting police to stop and fine individuals for not wearing a seat belt.
3. Identify one NHTSA-certified child passenger safety technician who has completed the 4-day course in each Kentucky community.
4. Support the Child Passenger Safety Committee in its efforts to ensure training and certification of technicians across the state.
5. Establish fixed car seat fitting stations to allow parents and care givers to make appointments to have car seats checked.
6. Educate health care providers, childcare and school personnel and encourage them to refer parents to such stations.
7. Educate child caregivers about the details of child passenger safety to be able to provide accurate information to parents.
8. Encourage other community agencies to work with car manufacturers to address the issue of preventing rear shoulder belts that eliminate the use of booster installation
9. Make culturally sensitive information on all child safety needs available for the entire population of the Commonwealth. Programs developed by NHTSA are specific to certain populations and can provide effective teaching.
10. Provide legislative enhancements to address crash trends.
11. Modify the current law to allow primary, rather than secondary, enforcement for all vehicle occupants.
12. Place babies under the age of 1 year in a rear facing restraint for best protection in a crash. A baby should be strapped into a seat which is firmly secured in the car during the entire ride. Adults should stop driving in order to change, nurse, bottle feed or comfort the baby.
13. Inform caregivers about agencies and organizations that can provide car seats based on financial eligibility. Other programs may assist parents to purchase a car seat at a reduced price.
14. Inform caregivers that a 5 point harness system is recommended over T-shields or tray shields to secure a child in a convertible car seat. Also warn parents to never place a rear-facing car seat in front of a passenger side airbag. Deployment of the bag even in a low-speed crash can kill the infant.
15. Counsel expectant parents and young families about transportation choices for the family vehicle. Trucks have become a popular choice for younger drivers, but are often not compatible to car seat installation.

Implications for State Policy

The team recommends legislative enhancements to address crash trends, persistently high crash rates, and the high number of injuries for drivers ages 16.5 through 17. Full GDL programs in other states and countries are addressing these issues. The following eight components comprise a full graduated licensing program, which rewards young drivers by removing restrictions for drivers who demonstrate they can drive safely (no violations).

1. Create three distinctive licensing levels.

    Level 1. Learner permit, six months minimum
    Level 2. Intermediate license, six months minimum
    Level 3. Full license

2. Create a visually distinctive license for Level 2.

3. Require teens to be free of traffic violations for six months before moving to the next level of licensure. Require parents/guardians to be notified of a teen's traffic violations.

4. Prohibit unsupervised night time driving between the hours of 10PM and 5AM during level 2 (driving to/from work or school is permitted anytime).

5. Restrict the number of non-family member passengers during Level 2.

6. Require a minimum of 50 hours of driving practice, with 10 hours of night time driving, during Level 1.

7. Require the existing education component to be completed before progressing to Level 3.

8. Require the use of safety restraints for all person in a vehicle driven by Level 1 or Level 2 drivers.

All-Terrain Vehicle Fatalities (ATV)

All-Terrain Vehicle (ATV) Deaths Susan Pollack, M.D.

Background….From 1997-1999, there was a trend toward increasing severity of All Terrain Vehicle (ATV) related injuries (Ref- Pollack, unpublished EMSC data). In 1998 there were 5 deaths of children under age 18. These were all boys ages 9, 13 (X2), 15, and 17, and the incidents occurred from May through October in Calloway, Martin (X2 in different months), Henry, and Daviess County. In 1999, there were also 5 pediatric deaths. Three boys and one girl were on ATVs, while one girl was involved in a bicycle versus ATV crash. Three of those four on ATVs were age 17, one was 14. The bicyclist was age 8. Incidents occurred in Lee, Pike, Clay, Hancock, and Fayette/Powell counties, and took place between April and November.

In 2000, there were 11 known ATV deaths among children under age 18 in Kentucky. The ages of these children were 1, 9 X2, 10, 14, 15 X2, 16 X2, and 17 (X2). Incidents leading to those deaths occurred in the following counties: Breathitt (X2), Floyd, Logan, McCracken, McCreary, Washington, and Woodford. The incidents occurred during the months of February, March, May, June, July, August, October and December.

Of note, over the past three years 16 Kentucky counties have experienced pediatric ATV deaths. From 1997-99, at least 61 of the 120 Kentucky counties are known to have had children who incurred severe injury on an ATV, making this the most ubiquitous injury problem in the state, after car crashes. (Ref- Pollack, unpublished EMSC data).

Two simple prevention strategies would have a major impact on ATV deaths. NO EXTRA RIDERS, as manufacturers recommend, is crucial in the often hilly terrain of Kentucky. HELMETS are recommended by manufacturers. Helmets would not prevent every death, since in backwards or forwards rollovers there are children whose chests are crushed under the ATV, and there are also cases in which a child with a helmet was thrown into a tree, resulting in a broken neck. But helmets would prevent some deaths, and they would prevent almost 50% of the severe, life changing head injuries from which youth survive but may not ever recover. Yet only 5/131 severely injured children in 1997-99 were reported to be wearing a helmet.

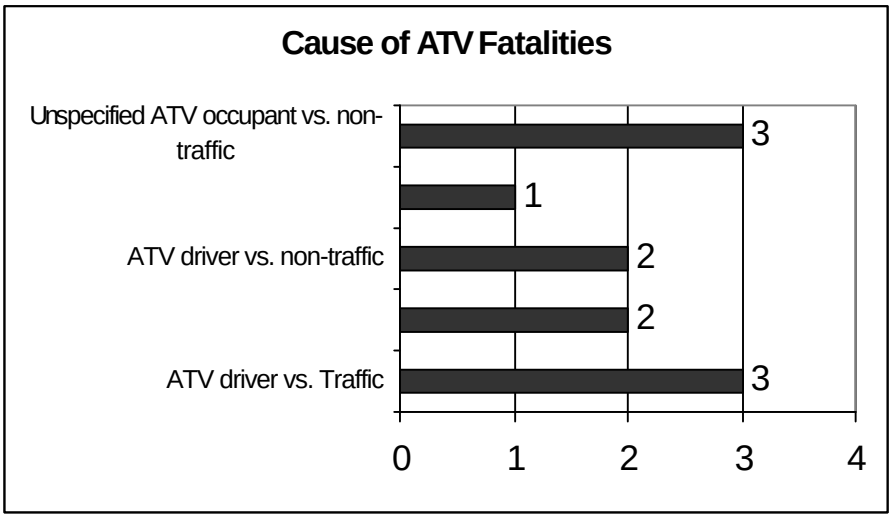
Because ATVs are motor vehicles and not toys, the American Academy of Pediatrics recommends that children under age 16 not drive or ride them at all. Repeatedly, the staff of Kentucky Pediatric Intensive Care Units report hearing parents say: "we didn't know they were dangerous". Physicians, nurses, health educators, and other health personnel need to educate parents about the sizeable risks involved. The inherent risks of children driving machines often sized for adults is augmented by the unforgiving terrain of Kentucky. Alcohol does not appear as a major factor for teen ATV deaths as it may be for adults, but speed, driving inexperience and vehicle control are. Everything that has been learned about teen car driving, teen motor vehicle crashes, and graduated drivers licensing suggests that driving skills on ATVs also must be acquired through sufficient maturity, supervision and practice, because without those children are ill-equipped to respond to a sudden environmental hazard or unexpected situation. Dealers offer a safety course which parents (and youth if riding) should be encouraged to take. Still, parents need to be helped to understand that it is

not developmentally reasonable to expect a 4 or 10 year old ATV driver to have judgement about hazards, any more than one would give children of that age the keys to one's car. Almost 1/3 of the severe ATV injuries from 1997-99 occurred among children under age 12.

Children under age 16 should ideally not ride ATVs. If they are going to ride, existing Kentucky law regulates engine size on public land (less than 70 cc if children are under age 12, less than 90 cc if ages 12-16.) All manufacturers state clearly that these off-road vehicles should not be driven on roads.

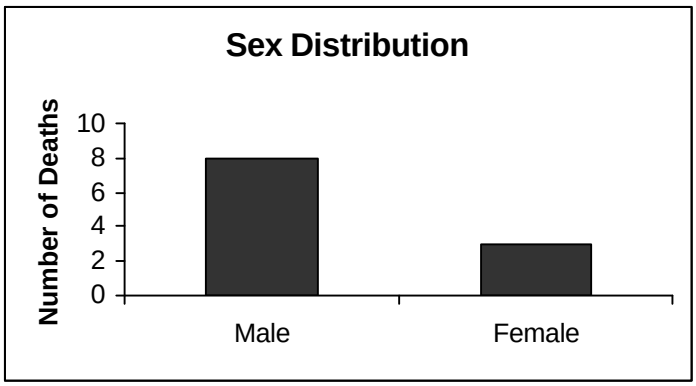
In summary, ATV injuries and deaths are a growing problem in Kentucky, a problem for more than half the counties. Rates are unavailable for comparison with other types of injuries, as no one has data on the exact number of ATV riders, but the severity of injuries and the number of deaths are increasing.

ATV Fatalities (N=11)

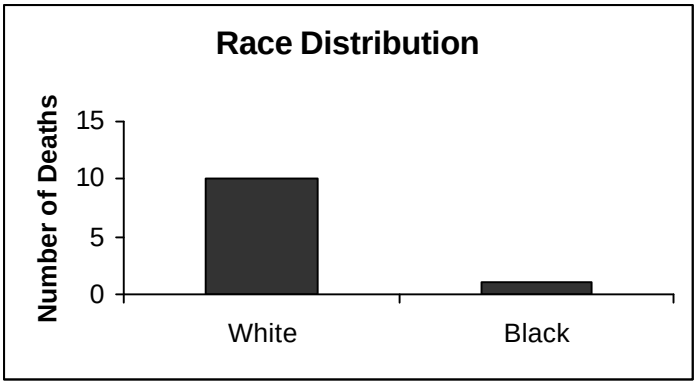


Three (27.3%) ATV fatalities were occupant non-traffic.

Three (27.3%) were driver vs. traffic.



- Eight (72.7%) ATV fatalities were males. (up from 5 male deaths in 1998 and 3 in 1999)
- Three (27.3%) were females. (up from 0 female deaths in 1998 and 1 in 1999)



- Ten (90.9%) were White.
- One fatality (9.1%) was Black.

Prevention Measures

- Educate parents to not allow young children to ride/drive ATV's.
- Encourage parents and caregivers to provide supervision and training for all youth who do ride ATV's.
- Inform riders that there should be no extra riders EVER on ATV's.
- Never ride ATV's on the roadway.
- Always use safety, equipment, especially HELMETS.
- Parental education is by far the most effective prevention measure. Most riding occurs on private land and will never be covered by legislation, therefore, parents and caregivers must take the lead in prevention.
- Engineering solutions, such as governors to regulate speed and rollover protection should be considered.

Drowning Fatalities

Drowning Fatalities

Drowning was the third leading cause of child fatalities in 2000 in Kentucky. Seventeen child fatalities were caused by drowning. According to Injury Prevention and Public Health, drowning is the third leading cause of unintentional child fatalities in the United States. Drowning is a preventable cause of death in childhood. Among infants, nationally the majority (78%) occur in the home. Of the home incidents, nationwide 71% were in the bathtub and 16% were in buckets. Children between the ages of 1-4 years were most likely to drown in artificial pools. Nationally, in a one year study, 37% of drowning victims were between the ages of 1 and 4 years of age and 29% were between the ages of 15 and 19. Seventy-four percent of victims were male. In 10 states, drowning is the leading cause of death for children <15 years. Males are four times as likely to drown as females. Drowning, by definition is fatal, however, there are 36 near-drowning victims for every drowning admitted to hospitals and 140 near-drowning victims treated at emergency rooms. One fifth of all drownings are related to boating.

The deaths of two young brothers, while swimming off a houseboat on Lake Powell in Arizona, August 2, 2000 triggered a National Institute for Occupational Safety (NIOSH) investigation to determine if the deaths were caused by carbon monoxide (CO) poisoning. The study found that houseboats had dangerously high levels of the gas in tests performed at Lake Cumberland in Kentucky. The levels were similar to those found at Arizona's Lake Powell.

Investigators from NIOSH and other agencies have found that since 1994, seven people have died on the Arizona lake from carbon monoxide poisoning as they swam behind a houseboat or under the rear deck near the exhaust. Thirty-eight people were treated and survived, including 16 pulled unconscious from the water.

No deaths have been attributed to carbon monoxide poisoning on or near houseboats at Lake Cumberland, which has been called the houseboat capitol of the world. About 1,500 houseboats are docked there.

Jane McCammon, leader of the occupational safety institute's team, said investigators chose to look at Lake Cumberland because of it's similarity to Lake Powell in the concentration of houseboats.

Forty-four people have drowned on Lake Cumberland during the past 10 years, according to the U.S. Army Corps of Engineers. But drowning victims aren't routinely tested for carbon monoxide poisoning during autopsies.

Occupational safety institute researchers have dubbed the cavity under the deck of some houseboats the "death zone." The Arizona deaths all were linked to houseboats in which gas generators mounted in the rear emitted exhaust fumes directly beneath the back deck and swim platform, often a favorite place for children.

Carbon monoxide is a very dangerous thing. People need to know, that under those decks, carbon monoxide can build up in lethal quantities.

When air with as little as a 10th of 1 percent of carbon monoxide is inhaled, the oxygen carried by the blood is replaced by the carbon monoxide, and the result is death from oxygen starvation. Tests on houseboats at Lake Powell found carbon monoxide readings around rear platforms that were thousands of times the level considered safe.

The tests found "significant concentrations," high enough to disorient an adult on a raft closely tied to the back of a houseboat.

McCammon said that some tests on Lake Cumberland houseboats with different exhaust designs didn't produce the high readings seen on Lake Powell. Some houseboats have exhaust vents on the side or at the very back corner, which is considered safer.

Researchers think carbon monoxide poisonings may have gone unnoticed on houseboats for years because the symptoms mirror those of heat stress, flu or even a hangover.

In the case of the deaths, coroners or investigators must request testing to measure the carbon monoxide level in a victim, as it would not be part of routine testing. Coroners have mistakenly ruled out carbon monoxide as a cause of death in drownings because victims didn't have telltale signs of the poisoning, such as bright red lips. Not all victims do.

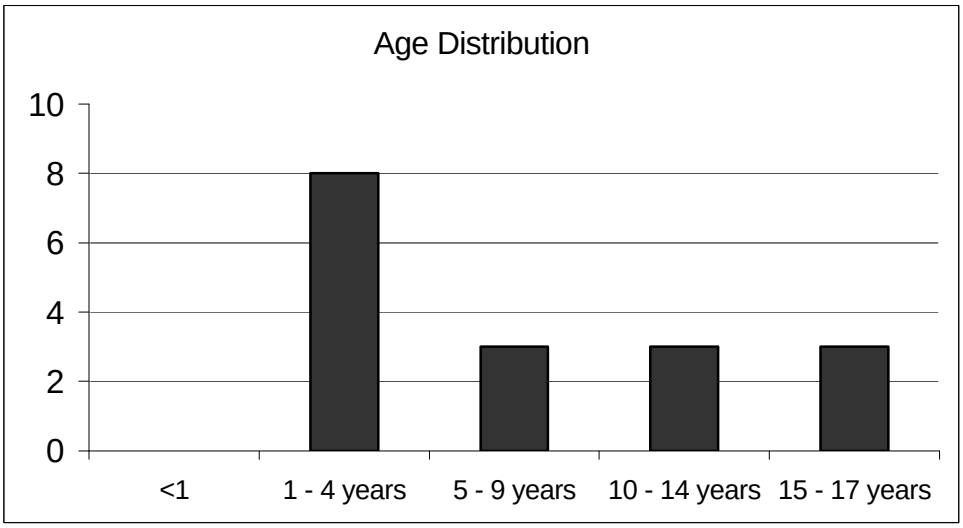
Swimming pools account for 60% of all drownings and 90% of all drowning victims are 0-4 years old. Alcohol may be involved in as many as half of all drownings.

One drowning study from Pediatrics, July 2001 reviewed death certificates from 1420 unintentional drowning victims less than 20 years of age. The age and sex of the victims were recorded as well as the site of the incident, to find why so many American children die each year in drowning accidents. The statistical data was obtained from the National Center for Health Statistics for the year of 1995. The data gives clear indication of the circumstances of childhood drowning as a threat to young children. The report states that the variety of sites in which children drown, even within specific age groups, emphasizes the need for a multifaceted approach to prevention.

A number of regional studies have examined the most common sites of drowning by age. Regionally, fifty-five percent of infant drownings were in bathtubs. The bathtub is the only body of water for which there is a specific International Classification of Disease (ICD)-10 code. Among children between the ages of 1 to 4 years of age, regionally 56% of drownings were in artificial pools, and 26% were in other bodies of fresh water. After the age of 5 years, the risk of drowning in a swimming pool is greater among black males compared with white males.

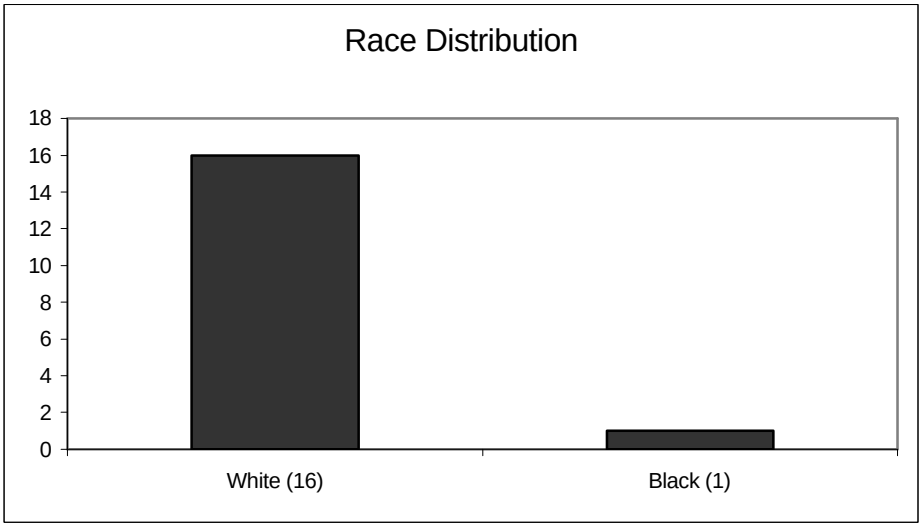
Consistent with previous studies, it was found that infants are most likely to drown in bathtubs. Buckets also play a role in this age group, and it is disheartening to report that 10 years after the publication of 2 articles describing the risks of large buckets, the number of bucket-related drownings per year remains unchanged.

Drowning Fatalities (N=17)



- Eight (47%) of fatal drowning victims were ages 1-4.

One study reviewed in "Where Children Drown , United States" written by Brenner, Trumble, Smith, Kessler, and Overpeck, states that drowning rates in swimming pools were 12 to 15 times greater among black males compared to white males ages 10-19 years.



- Sixteen (94.1%) of all drownings were white.
- Only 1 (5.9%) was black.

- Sixteen (94.1%) of all fatal drownings were whites.

Prevention Measures

The American Academy of Pediatrics addressed the issue of childhood drowning with the following suggestions:

- Provide constant supervision of infants and young children when they are in the bathtub or around other bodies of water.
- Install isolation fencing that separates the pool from the house for homes with residential pools.
- Use personal floatation devices when riding in a boat or playing near a lake or ocean.
- Teach children to never swim alone or without adult supervision.
- Educate about the dangers of alcohol and drug consumption during aquatic activities.
- Teach parents and teens cardiopulmonary resuscitation (CPR).
- Swimmers should avoid the area under the houseboat swimming platform or rear deck while the engine or generator is running. Don't sit on the platform while the generator is running. (If exhaust vent is on side, avoid that area). Also use caution when boats are tied together.
- Adults should watch children playing or swimming in the platform area pf houseboats.
- Know the signs of carbon monoxide poisoning: headache, dizziness, weakness, nausea, dry mouth, confusion. Remember: carbon monoxide is odorless.
- If carbon monoxide poisoning is suspected, seek medical attention immediately.
- Read the warnings on motors and engines posted by the houseboat manufacturer. Never disconnect the carbon monoxide detector or monitor on the boat.

Suffocation Fatalities

Suffocation Fatalities

Eighteen children died of suffocation injuries or other threats to breathing. Those individuals at greatest risk for these injuries are the smallest members of society.

Suffocation, also called asphyxiation, occurs when something prevents oxygen from getting to or through a child's mouth and nose.

Choking occurs when a small object, such as a piece of food, blocks a child's internal breathing.

Aspiration happens when a child inhales and causes an object to be sucked into his windpipe or lungs.

Strangulation occurs when something becomes wrapped around a child's neck and interferes with breathing.

Young children, especially those under the age of 3, have small upper airways. It doesn't take much to block the trachea, also called the windpipe, which carries air to the lungs. These young children also haven't become adept at chewing, and they love to stick everything, edible or not, in their mouths or other body orifices.

Infants are at special risk because they can't lift their heads and can easily suffocate in soft bedding. An infant doesn't have the strength to pull his head out if it gets caught, such as between the side of a crib and a loose-fitting mattress.

Plastic bags and soft bedding are the main culprits. A portion of the deaths that have been attributed to sudden infant death syndrome (SIDS) in the past are now thought to have been suffocation due to soft bedding. Sheets in cribs or beds can be hazardous to babies. Since 1984, the Consumer Product Safety Commission (CPSC) has learned of the deaths of 17 babies, most under the age of 12 months, who strangled or suffocated when they became entangled in sheets in their crib or bed. The CPSC has worked actively to strengthen the safety requirements for fitted crib sheets. Consumers now should find warning labels that stress the importance of secure fitting linens in cribs and beds.

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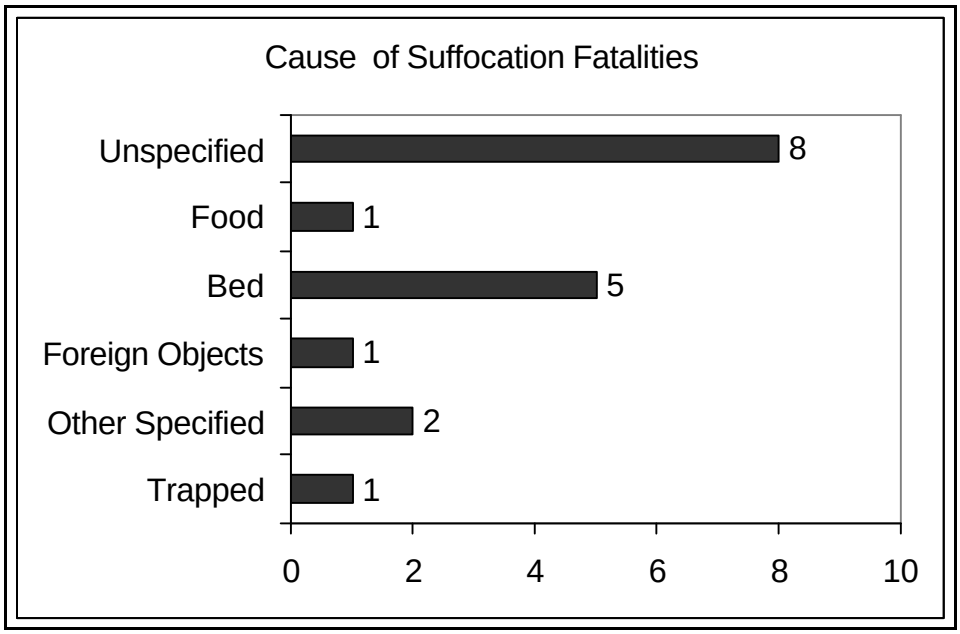
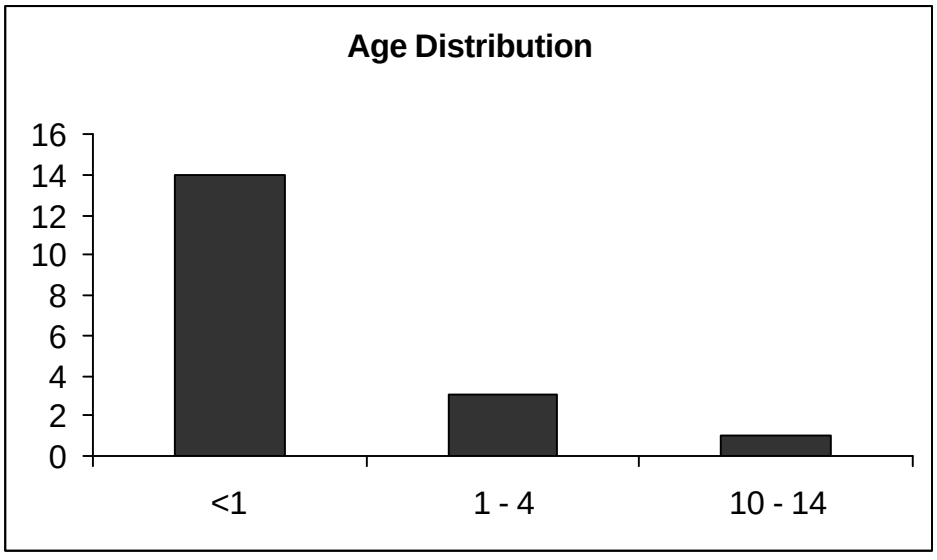
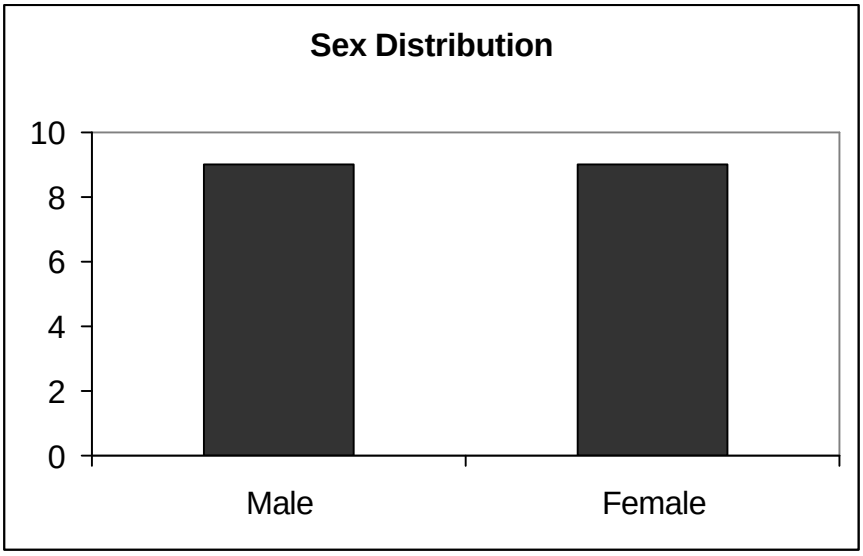
Suffocation Fatalities (N=18)



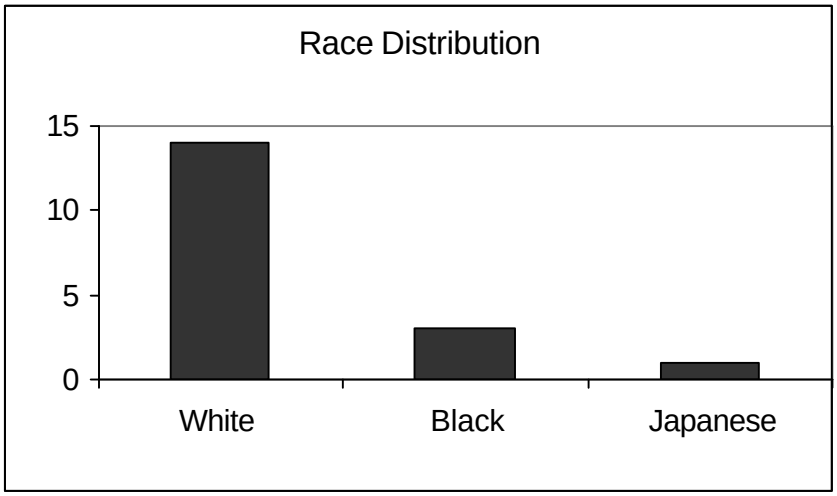
- Eight (44.4%) of suffocations were from unspecified causes.
- Five (27.7%) were suffocations in bed.



- Fourteen (77.7%) of all suffocations were infants < 1 year old.
- Three (16.7%) were between ages 1-4.
- One (5.6%) was a medically fragile child 10-14 years old.



- Nine (50%) of suffocations were male.
- Nine (50%) were female.



- Fourteen (77.7%) of suffocations were white.
- Three (16.7%) were black.
- One (5.6%) child was Japanese.

Prevention Measures

- Watch everything a child puts in his mouth. Small toys, coins and even bits of food can block a child's airway. Choke tubes are available to measure the size of toys and food appropriate for small children
- Keep informed about toy and product recalls.
- Make sure bedding is appropriate for infants or children.
- Remove pillows, excess linen and toys from the crib before sleep time.
- Caution parents to NEVER co-sleep with an infant if the adult is using alcohol, drugs, is overly tired or obese.
- Encourage parents and caregivers to learn cardio-pulmonary resuscitation (CPR) and the Heimlich maneuver.

Fire Fatalities

Fire Fatalities

Fire deaths in Kentucky were reduced in 2000 to 11, down from 17 in 1999. This was due to increased education of the public regarding prevention measures identified through the study of child fatalities. Although there has been a dramatic decline in the number of fire related fatalities in the last ten years, fires and burns remain the third leading cause of unintentional injury deaths among kids. According to the National SAFE KIDS Campaign, each year, more that 800 children ages 14 and younger are killed in residential fires, and 60 percent of them are 4 and under. Younger children are less likely to understand danger and are the least able to react to it.

Because children's skin is thinner, it will burn at lower temperatures than adult's and children's faster metabolic rates make them less able to withstand the effects of smoke. According to National Safekids, it is estimated that up to three fourths of fire-related deaths are from smoke inhalation.

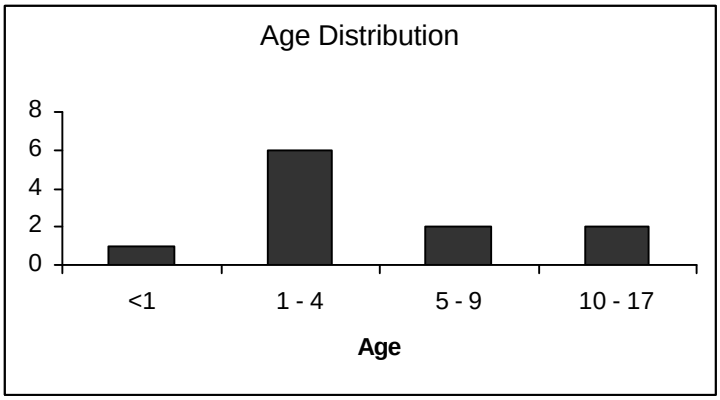
One of the most effective ways to prevent injuries and deaths from fires is to install and maintain smoke detectors in households. Many local fire departments are installing and checking fire alarms free of charge. Typically these programs begin around Halloween when the temperature begins to get cooler and people begin to use either space heaters or heating systems that have not been turned on since the past winter.

The Health Access and Nurturing Development Systems program (HANDS), funded through the Governor's Early Childhood Development Initiative, provides extensive education to at risk parents regarding fire safety. The following areas are reviewed; 1) Is the fireplace or chimney in working order? 2) Are smoke alarms within 10 foot of each bedroom? 3) Are smoke alarms checked frequently? 4) Does the family have a fire evacuation plan? 5) Are there two unrestricted exit doors? 6) Is there a window in each bedroom? and) Does the family have a fire extinguisher? The Healthy Start/Childcare program, another Early Childhood Initiative, also addresses safety in the childcare setting by providing consultations to childcare providers, including product recalls, appropriate supervision and safety checks.

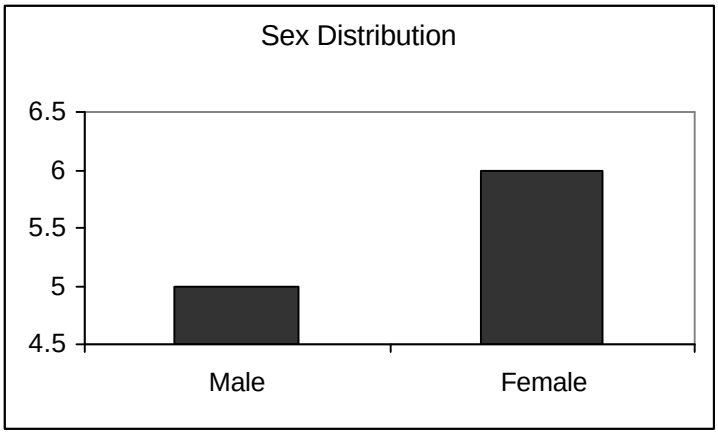
The Center for Disease Control (CDC) published "An Inventory of Programs, Efforts to Increase Smoke Detector Use in the U.S. Household," to promote awareness of fire prevention efforts. The Kentucky program reviewed in the booklet is in Louisville. In 1997, the city passed legislation requiring smoke detectors in all rental property. Fatalities dropped dramatically, but a significant pattern of non working smoke alarms in many homes developed in owner-occupied dwellings. In response to this, the city set aside money to purchase smoke detectors and provide public education. Since July 1986, free smoke alarms have been available upon request from the Louisville Fire Department. Information about the recipients is entered into a data base and reminders about changing batteries are mailed. This a great example of a community effort to protect children.

Kentucky has the added problem that many families in rural areas live in mobile homes. This type of housing, combined with space heaters, has proven a deadly combination for families. Added to the situation may be the rural setting, making water to fight the fire more difficult to access. Kentucky also has one of the highest smoking rates in the United States and cigarette smoking is a major contributor to fire related fatalities.

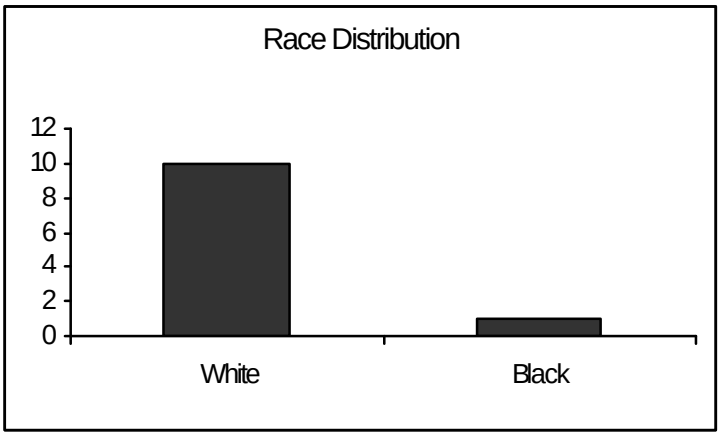
Fire/Smoke /Burn Fatalities (N= 11)



- Six (54.6%) of all fire related fatalities were ages 1-4.
- Ages 5-9 and 10-17 each had 2 (36.4%).
- One child (9.0%) was < 1 year old.



- Six (54.6%) were female.
- Five (45.4%) were male.



- Ten (91%) of child fatality by fire were white.
- One (9.0%) was a black child.

Prevention Measures

- Fire safety education begins early. As soon as a baby is mobile, start teaching the words "hot' and "no" while moving the child away from potential hazards. Start to use that special tone of voice that says" I really mean it". A child will understand tone long before he learns the words.

- Talk to children about the dangers of fire and how to prevent them.

- Cut the chances of dying in a fire in half by having a working smoke alarm in the home. Have an alarm within 10 feet of each bedroom. Check them frequently to ensure proper working order.

- Draw up an escape plan that the family practices regularly.

- Have two unrestricted exit doors in the house and a window in each bedroom.

- Share the plan with sitters or other caregivers.

- Have heating systems, fireplaces, and wood stoves inspected annually and cleaned when necessary.

- Have a fire extinguisher which is easily accessible and teach all family members to use it.

- Lock up matches and cigarette lighters.

- Never leave a child alone in a room with candles, heaters, or with a burning fireplace.

- Set tap water temperature to no more than 120° F.

* The American Academy of Pediatrics suggests that parents of special needs children consider a safety plan that fits the needs and abilities of their child. For example, a child who is hard-of-hearing or deaf may need a smoke alarm with a flashing strobe-light feature.

Agricultural Fatalities

Farming is a very dangerous profession. The days of the family farm where hard work was the only physical risk to children is over. Today's farms are equipped with expensive and dangerous pieces of machinery. These machines require adult operators with adult physiques. Young children are not equipped either physically or emotionally to run this equipment.

This section of the report was written by Larry Piercy. Mr. Piercy is an Agriculture Safety and Health Specialist. He works at the University of Kentucky School of Agriculture. Mr. Piercy has a Master of Science degree in Environmental Health. We thank Mr. Piercy for his contribution to the report.

AGRICULTURAL FATALITIES

INTRODUCTION

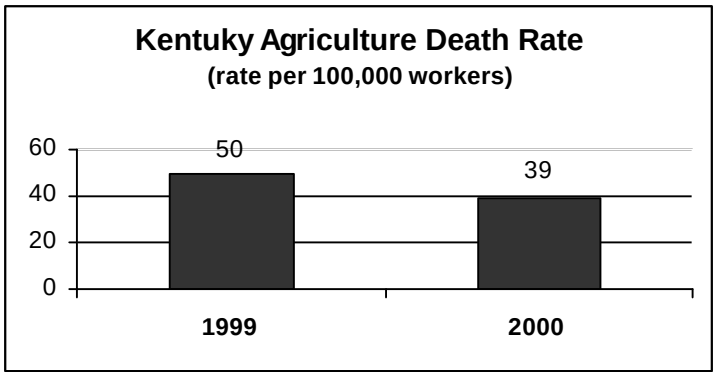
Unlike most children and youth today, those growing up in agriculture are placed in a very unique environment with its own set of hazards and risks. While agriculture has traditionally been viewed as a healthy environment for raising a family, it is also recognized as a hazardous industry with worker death rates far exceeding the average for all industries in the US. The rate for Kentucky agriculture even exceeds the national worker death rates for agriculture. Add to this the unique fact that, unlike most industries, in agriculture the home and work place are the same location and the involvement of children and youth is an accepted way of life. Thus, farm families are faced with a constant challenge to insure the safety and health of all children and youth who may live, work, or visit the farm.

Another important factor in agriculture is the extent of job training that youth receive. The need for training and supervision of young workers is apparent with the various types of machinery, farm work environments, and work procedures. However, with the independent, family-type operation, the extent of training and supervision of young workers is highly variable. Youth growing up in agricultural communities would appear to have some advantages as they often hear stories and experiences of injury incidents and close calls experienced by parents, relatives and neighbors. Through these repeated stories and personal experiences farm youth generally develop some awareness of the hazards. Other non-farm youth miss this informal training and must depend upon more formal types of training to develop this awareness. However, regardless of their personal experience or knowledge of agriculture and the associated hazards, the ultimate responsibility for the safety and health of youth living, working or visiting agriculture lies with an adult.

To protect youth, the adult must be responsible for determining the safety guidelines for the work or leisure activities based upon the knowledge and information available to them at the time. They must correctly identify the potential hazards and associated risks along with determining the knowledge, experience, capability and the physical and mental maturity of the youth involved. In agriculture, as in other situations, the adult's decision is often influenced by the individual's personal experience, perception of the risk, perceived cultural norms in the community and often the pressures to get the job done. A general lack of safety and health guidelines for acceptable age appropriate tasks in agriculture has further complicated the decision making process for parents and employers.

BACKGROUND

Agriculture has long been recognized as a hazardous industry with fatality rates well above the average for all industries in the US. According to the National Safety Council[1], the death rate for unintentional injuries in agriculture in 1999 was 22.5 deaths per 100,000 workers which was second only to mining with a rate of 23.1 deaths per 100,000 workers. This rate for agriculture was nearly 6 times greater than the average for all industries in the US with a rate of 3.8 deaths per 100,000 workers. Although Kentucky farms tend to be smaller with an average of 149 acres per farm compared to 432 acres for the average US farm[2], the death rate in Kentucky agriculture is higher than the national rates. According to the Kentucky Injury



Prevention and Research Center[3] the death rate in Kentucky agriculture was 50 deaths per 100,000 workers in 1999. (The Kentucky rate for the year 2000 dropped to 39 deaths per 100,000 workers.) While the rates from both sources only include youth 16 and over , they are indicative of the hazardous nature of the agricultural industry and the potential risk for youth who are exposed to this type of environment, whether through work activities or inadvertent types of exposure during play activities or visits to the farm.

Documentation of the injuries and deaths associated with children and youth living and working in agricultural is difficult since there is no national reporting system. In 1985 Riveria[4] reported over 300 child deaths per year occurring on US farms. A follow-up study by Riveria[5] in 1997 reported that 104 children, 19 years of age and younger, die each year as a result of injuries on US farms. The 1997 study indicated a 39 percent decline in the farm fatality rates for children and youth but neither study differentiated between injuries that occurred during work activities and those occurring to children and youth who were bystanders. Stallones[6] looked at farm related deaths of Kentucky children for the years 1979-1985 and found overall, non-motor vehicle death rates of 16.5 deaths per 100,000 farm boys for the ages 0-14 and rates of 6.5 deaths per 100,000 farm girls for the ages 0-14. The corresponding rate for all Kentucky and US white males were 13.0 and 12.3 deaths per 100,000 population respectively. The corresponding rate for Kentucky and US white females were 5.1 and 6.5 deaths per 100,000 population. When the individual age groups were compared, Kentucky farm boys ages 0-4 showed a much lower death rate than US males, but the rates for Kentucky farm boys in the 5-9 and 10-14 age groups were more than double the US counterparts. The rates for Kentucky farm girls in the 5-9 and 10-14 age groups were much lower than the males and, overall, similar to their counterparts in the US with some exceptions in the various age groups.
Tractors and other farm machinery accounted for 30.2 percent of the deaths of Kentucky farm boys ages 0-14 and 38.5 percent of the deaths for farm girls ages 0-14. Although these rates included both work and bystander deaths, they clearly indicate the increased risk of death for farm boys and the high association with farm equipment for both the boys and the girls. This increased risk associated with farm equipment is also evident in reports of work related deaths for all US youth working in agriculture. The US Dept. of Labor[7] reported 468 youth 17 and under were killed in work related activities in the US during the period 1992-1998. Forty- three percent of these deaths occurred in agricultural work although only 6 percent of the youth were employed in agriculture. About one-third of the agricultural deaths for youth 17 and under were tractor related, and half of these were from tractor overturns according to the Dept. of Labor Report[7].

STANDARDS FOR YOUTH WORKING IN AGRICULTURE

While the source and mechanism of deaths to children and youth in agriculture have been documented, the underlying causes and remedies for the prevention of these fatalities are complex and not always easily identified. The many unique aspects of agriculture such as the home and work place being the same location, the economic pressures on farm families, the remote work locations, the independent nature of the farming operation, and the tradition of family involvement in work activities adds to the complexity of insuring the safety of children and youth who live and /or work in the agricultural environment. Until recently there were few guidelines or recommendations for determining acceptable activities for youth working in agriculture. The need for these guidelines or recommendations grew out of the agricultural community and an action plan developed by the National Committee for Childhood Agricultural Injury Prevention[8]. In 1996 the National Children's Center for Rural and Agricultural Safety and Health in Marshfield, Wisconsin initiated efforts to develop recommendations for age appropriate tasks for children and youth who work in agriculture. Through a national consensus-building process the North American Guideline for Children's Agricultural Tasks[9] were completed in 1999. These guidelines, for the first time, establish a comprehensive set of materials outlining acceptable age and developmentally appropriate activities for youth while still providing the opportunity for productive work in agriculture. For the first time parents and employers have a national reference for establishing acceptable work activities for youth in agriculture. These are only general guidelines to give parents and employers guidance for determining the appropriate activities depending upon the skills and experience of the individual involved. The guidelines include such activities as animal care and feeding, operating a tractor and farm machinery, manual labor activities and specialty crop production including setting, topping, harvesting and stripping tobacco.

The only other standards for youth working in agriculture are those specified in the child labor sections of the Fair Labor Standards Act. This federal legislation sets forth specific requirements for the employment of children and youth under the age of 18. The requirements include minimum wages, work hours outside school hours, age restrictions and hazardous occupations and activities. For agriculture the act includes the Hazardous Occupation Orders for Agriculture (HOOA) which identifies those activities in agriculture considered too hazardous for children and youth under the age of 16. (The Act does not apply to those youth who are working on farms owned and operated by their parents or legal guardians.) Some of the activities considered too hazardous for the employment of youth under the age of 16 include: operating tractors with over 20 power take-off (PTO) horsepower and connecting or disconnecting equipment to such a tractor; and operating or working with a corn picker, grain combine, hay mower, forage harvester, feed grinder, crop dryer, forage blower, auger conveyor, etc. However, an exemption is available for the above activities for 14 & 15 year old youth who have been certified as completing a specified 10 or 20 hours of 4-H or vocational agriculture training in tractor and machinery safety. Other agricultural activities such as working in an enclosure with a bull, boar, stud horse, sow or cow with a newborn; handling anhydrous ammonia or blasting agents; working at heights over 20 feet; handling certain types of pesticides; etc. are considered too hazardous for the employment of any youth under the age of 16. The Dept. of Labor's Wage and Hour Division oversees the enforcement of these standards.

PREVENTION MEASURES

Farm Families

- Farm families should adopt a 'No Extra Rider' policy for all tractors and farm equipment except where another rider is essential for the work activity such as on wagons for loading hay bales or sticks of tobacco or vegetable and tobacco trans- planters etc.

- Tractors operated by youth should be equipped with an approved Roll-Over Pro tective Structure (ROPS) and a seat belt for protection from tractor overturns.

- Machinery and equipment used by youth should be equipped with shielding, guarding and other safety equipment equivalent to or better than that originally provided on the equipment. Youth should not be allowed to use equipment that does not meet acceptable safety standards.

- Farm families and agricultural employers should follow recommendations from the North American Guidelines for Children's Agricultural Tasks in determining age and developmentally appropriate agricultural work activities for children and youth.

- A walk around survey of the agricultural premise should be conducted on a regular basis to review machinery, equipment, facilities, and work procedures that could be potentially hazardous for children and youth who live, work or visit the work site. Some areas and work activities deemed too hazardous should be made "Off Limits" for certain age groups. Correctable hazards should be eliminated and training and protective equipment should be provided for those activities considered safe with training and appropriate protective equipment.

- A family walk around the farm facilities and equipment should be conducted with children to discuss potential hazards and those areas that are "OFF LIMITS".

- Young workers should receive training for each work activity. The training should include: identifying the potential hazards related to the activity, a demonstration of the safe work procedures, direct assistance while the youth becomes familiar with the activity, direct supervision until they are experienced and capable of performing the task safely, and continued supervision until they are skilled in the activity.

- Adult workers should be role models for youth by demonstrating safe work procedures at all times.

- Farm employers should be familiar with the child labor provisions of the Fair Labor Standards Act and the Hazardous Occupation Orders of Agriculture.

Communities

- Promote farm safety through community field days, farm safety camps, safety field days at schools and other such activities to provide both city and rural youth information and training on the hazards and risks associated with a agriculture.

- Use mass media to promote community awareness of the potential hazards and risks in the agriculture environment for children and youth, and to encourage parents and employers to follow age and developmentally appropriate guidelines in assigning agricultural tasks to children and youth.

- Promote age and developmentally appropriate agricultural tasks by children and youth by the media.

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Intentional Injury In Kentucky

Child Fatalities with Abuse or Neglect as a Contributing Factor

The Department for Public Health and the Child Fatality Review Team thanks Peggy Arvin, R.N. and Nancy Fox, BSW. for writing this section of the report.

Ms. Fox and Ms. Arvin work for the Commonwealth of Kentucky in the Department for Community Based Services for the Protection and Permanency Division. Their expertise and knowledge has provided the information for this portion of the report and the entire team is grateful.

The data in this portion of the report may vary somewhat from the data in other sections. The Department for Community Based Services has a unique system for the investigation of child abuse and neglect. Local coroner's offices do not always have the information from these reports at their disposal when death certificates are completed. The social services personnel may get further information about the circumstances leading up to a child's death that includes abuse or neglect. These cases of abuse or neglect can be alleviated by the child fatality review process. Coroner's are to contact the local social services office, the health department and law enforcement to gather any information about the child and the family. This information assists the coroner in making a more informed decision about the cause of death.

Fatalities Due to Child Abuse and Neglect

Overview—The National Picture

While total homicides in the United States continued to fall in the 1990s, the number of child abuse fatalities has remained unchanged at about 1 per 100 child deaths per year. Most experts believe that the actual number of fatalities due to abuse and neglect is considerably higher.

A number of explanations have been offered for the discrepancies between reported cases and estimated actual cases. It is believed that many deaths are disguised, misdiagnosed or mislabeled as accidental or natural deaths. Many abuse and neglect deaths can only be diagnosed by thorough scene investigations and autopsies. Even then, findings may mimic other unintentional injuries or natural causes. As a society, it is difficult for anyone to believe that a person could kill a child through an abusive or neglectful action. There are usually no witnesses to an act that leads to a child abuse homicide. Because the perpetrators are usually parents or other caregivers, the first responders to a child death scene, medical personnel or investigators, will sometimes accept explanations given for the events that caused the death.

There are many forms of physical abuse and neglect that lead to death. Physical abuse is the infliction of injury by punching, beating, kicking, biting, burning, shaking or otherwise physically harming a child. A major cause of death is inflicted head trauma, including severe shaking.

Most children die from abuse when a caregiver loses patience with the child. The most common precipitating "triggers" are inconsolable crying, bedwetting, fussy eating and disobedient behavior.

Fatalities from neglect include a number of types. Chronic neglect includes depriving a child of food, a clean environment or safe shelter. Deaths can result from malnutrition, failure to thrive, illnesses and/or starvation. Medical neglect includes failure to seek medical care when a child is ill. Many neglect cases result from failure to adequately supervise a child, often for extended periods of time. Negligence on the part of a caretaker can lead to bathtub drownings, suffocations, falls, poisonings and other types of fatal accidents.

Children under the age of five are the most frequent victims of child abuse fatalities, with 75% of those being three years of age or younger.

Fathers and other male caretakers are responsible for over three-quarters of fatal abuse, while mothers account for the majority of neglect. While no single profile fits every case, several factors seem to characterize many caretakers who abuse or neglect children. They are more likely to:

- Be depressed or unable to cope with stress;
- Have a problem with drugs or alcohol;
- Be a victim or perpetrator of domestic violence;
- Have been a victim of child abuse themselves;
- Live near or below the poverty level;
- Have not finished high school;

The following risk factors are often found in situations where a fatality occurs:

- Younger children, especially under the age of three;
- Children with emotional and health problems;
- Young children left with male caregivers who lack emotional attachment to the child;
- Parents, caregivers and children who are socially isolated;
- Caretakers who abuse alcohol or drugs;
- Caretakers who have a history of violence, as a perpetrator or victim;
- Caretakers who are depressed;
- Families living in poverty;
- Parents and caregivers with unrealistic expectations of child development and behavior;
- Parents who were very young at the birth of their first child;

In Kentucky

The Cabinet for Families and Children, Department for Community Based Services is the agency in Kentucky with the statutory responsibility for receiving and investigating reports of alleged child abuse and neglect. KRS 600.020 (1) defines an abused or neglected child as "a child whose health or welfare is harmed or threatened with harm when his parent, guardian, or other person exercising custodial control or supervision of the child: (a) inflicts or allows to be inflicted upon the child physical injury…by other than accidental means… and (h) does not provide the child with adequate care, supervision, food, clothing, shelter and education or medical care necessary for the child's well-being." When an allegation is made that a child's death may be due to abuse or neglect, an investigation is conducted by a social service worker from the Cabinet, usually in conjunction with law enforcement. A finding of "substantiated" or "unsubstantiated" is made in relation to the allegation of abuse or neglect. This is a social work, not a legal determination. Law enforcement and prosecutors decide if any criminal charges will be brought against the perpetrators. Particular emphasis in the social service investigation is given to the safety and well being of other children in the household.

The following information relates to incidents in which there was a "substantiated" finding of abuse or neglect regarding the death of a child in the year 2000. The numbers will differ from those derived from death certificates due to a different manner of categorizing child deaths. For example, if a young child is left unsupervised and drowns, the Cabinet would classify that as a death due to neglect. Most likely the death would be classified as accidental on the death certificate.

In the year 2000:

- There were 27 deaths in which there was a "substantiated" finding;
- These involved 25 incidents, (one incident involved the death of 3 siblings);
- Fourteen (14) deaths were substantiated as abuse; thirteen (13) were substantiated as neglect;

Age	**Male**	**Female**	**Percentage of total**
Less than 6 mos.	6	5	41
6 mos. – 1 yr.	1	2	11
1 – 3 yrs.	3	3	22
4 – 6 yrs.	3	1	15
7 – 10 yrs.	3		11

- Sixteen (16) victims were males; eleven (11) victims were female;
- Alcohol or drugs were a factor in at least eight (8) deaths;
- There was a history of domestic violence in at least eight (8) of the deaths;

Cause	**No. of victims**	**Ages**
Shaken Baby Syndrome	4	1 mo., 4 mos., 4 mos., 2 yrs.
Positional asphyxiation due to neglect – e.g. drug/alcohol use by caretaker	4	3 wks., 2 mos., 3 mos., 9 mos.
Lack of supervision resulting in drowning	4	30 mos., 34 mos., 35 mos., 6 yrs.
Intentional suffocation	4	3 mos., 16 mos., 28 mos., 5 yrs.
Auto accident due to caregiver DUI	3	19 mos., 5 yrs., 9 yrs.
Head trauma	2	2 mos., 3 mos.
Lack of supervision resulting in ATV accident	1	9 yrs.
Abandoned newborn	1	0
Fire intentionally set	1	6 yrs.
Medical neglect/starvation	1	9 mos.
Auto related	1	10 yrs.
Internal injuries from inflicted trauma	1	15 mos.

- There had been prior reports of abuse or neglect involving twelve (12) of the cases.

Alcohol, drugs, domestic violence and neglect alone, or in combination, were present in 22 of the 27 deaths.

Relationship	No. of victims	Percentage of total
Mother alone	10	37
Both parents *	6	22
Mother and paramour *	5	18
Father alone	4	15
Other relative	1	4
Unknown	1	4

Age at Death

There had been prior reports of abuse or neglect involving twelve (12) of the cases.

52% of deaths were children under 1 yr. of age
74% of deaths were children under 3 yr. of age

Perpetrator Relationship to Victim

*In some incidents, the male caregiver was substantiated for abuse and the female caregiver substantiated for neglect because she did not try to take any action to protect the child or get medical care after the child was injured.

Children who died in Kentucky in 2000

These are the stories of some of the children who died from abuse or neglect.

- A mother reports she put her three daughters ages 16 mos., 28 mos. and 5 yrs. to bed and went outside to talk to neighbors. When she went in to check on them, they were dead. Autopsies determined the children had been suffocated. Records showed that a fourth child of this mother had died at age 16 days of age in 1999, originally diagnosed as SIDS. That child's death was also determined to be from suffocation. The mother was charged with four counts of murder and entered an Alford plea to the charges.

- A father with a history of domestic violence toward his wife and alcohol abuse had been out until 5 a.m. drinking. He slept until about 10 a.m. and then left to go "4 wheeling." His wife did not object to him taking their 2 ½-year-old son with him. They went to an area near a creek and the father apparently drank more and passed out. The child drowned in the creek. The father was charged with reckless homicide and the mother with endangering the welfare of a minor.

- A 15 month old child and her four month old half- brother were left in the care of the father of the four month old, while the mother went to work. She found the 15 month old child unresponsive when she returned. The child died of blunt trauma injuries to her chest and abdomen and showed evidence of old healing rib fractures. After the death, the mother reported her paramour had been abusive to her starting during her pregnancy and had become abusive to the 15 month old when that child's father began to visit her. The paramour was charged with murder and pled guilty. The mother pled guilty to endangering the welfare of a minor.

- Parents had been warned by a social worker of the potential dangers of putting their 4-month-old baby on a bean bag chair. They subsequently left the child on the bean bag chair to sleep and found her unresponsive in the morning. Their trailer was found to be littered with dirty diapers, soured baby bottles, garbage, and evidence of drug usage. Both parents were charged with reckless homicide and pled guilty.

- A 19-year-old mother and 20-year-old father, along with their 3-month-old daughter, were staying with relatives. The father was allegedly the last one to feed the baby and put her to bed. The next morning the child had visible bruises on her face and appeared to be listless. The child was not taken to the hospital until the evening. She was found to have a severe head injury and broken ribs among other injuries. She was diagnosed with Shaken Baby Syndrome and Battered Child Syndrome. She died two days later. The father was charged with murder and the mother with complicity to murder.

The deaths in Kentucky reflect many of the characteristics noted in national studies:

- Almost 75% of the victims were under 3.
- Head injuries were the leading cause of death.
- Alcohol and drug abuse played a role in a significant number of deaths.
- Mothers were involved as perpetrators in 77% of the deaths, but were more likely to be neglectful than abusive.
- There was a history of domestic violence in at least eight of the incidents.

Alcohol and substance abuse play a substantial role in those deaths. The Governor's Early Childhood Development substance abuse initiative along with the Medicaid substance abuse waiver provide opportunities for mothers in need to receive both prevention education and treatment services. These programs also address family counseling for co-dependency.

The HANDS program addresses shaken baby syndrome. Healthy Start/Childcare addresses a range of the following issues through consultation with childcare providers including:

- Back to Sleep campaign to reduce Sudden Infant Death Syndrome (SIDS)
- Playground safety including the importance of supervision, age appropriate equipment and safe surfaces
- Care seat safety
- Consumer Product Safety recalls

Homicide Fatalities

Homicide Fatalities

Twenty one children died from homicide injuries in Kentucky in 2000, up from 19 in 1999. Breaking this number down to common denominators indicates that attention to this problem is needed to make Kentucky a safer place for children.

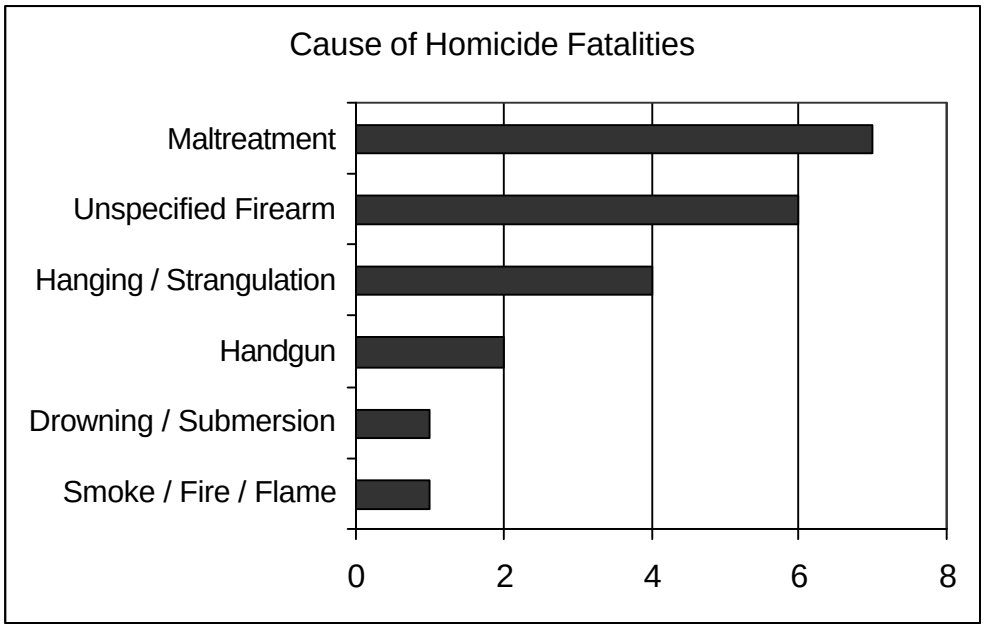
The U.S. Department of Health and Human Services Public Health Service provides these facts in the publication "A Guide For Parents." Homicide is the second leading cause of death for teenagers. It is the number one cause of death for black teens. Most homicides occur because of violence. Alcohol is involved in most cases of violence. Every year 32,000 people die from gunshot wounds.

Parental involvement with children is the single most important contributing factor to a successful happy life for children. Parents are the most important influence in children's lives and it is not what parents say, but what they do that is the most influential for children. Parenting is a responsibility that begins with conception and continues until adulthood. To be a good parent can be the most rewarding accomplishment in our lives. Being a parent is difficult and may require help. When there is no extended family available to assist a young couple, the task may fall back to society. Parenting programs for new parents and parents who are at risk are invaluable to families and society. These programs improve the entire community.

Prevention is addressed through the Governor's Early Childhood initiatives. The HANDS program addresses the following with high risk families:

- Is the firearm stored securely and unloaded?
- Are prescription drugs, toiletries or other poisonous substances inaccessible to the curious toddler?
- Are drapery cords out of the child's reach?
- Are pen, knives, nail scissors and pocket change out of the child's reach?

Homicide Fatalities by Cause (N=21)



- Seven of homicide fatalities were from maltreatment.
- Six involved an unspecified firearm.
- Four were by hanging/ strangulation.
- Two homicides involved a handgun.
- One fatality each was drowning and fire.

- Six of homicides were <1 year old.
- Four were ages 1-4.
- Four were ages 10-14.
- Five were ages 15-17.
- Two Fatalities were ages 5-9.

Prevention Measures

- Support and encourage the multidisciplinary review of fatalities resulting from abuse and neglect in order to develop prevention strategies.

- Educate and support the medical community in identifying child abuse and/or neglect.

- Encourage collaboration among human services agencies and other community resources who can provide support to families at risk for abuse and neglect.

- Provide opportunities for parent education programs that model appropriate parenting behavior, especially for at risk parents of infants and young children.

- Encourage the availability and accessibility of quality child care for high risk families.

- Provide programs for abused and neglected children to minimize the long-term effects of maltreatment.

- Encourage public education and awareness programs regarding the nature and incidence of maltreatment**.**

- Provide alcohol, tobacco and other drug (ATOD) prevention and cessation education through prenatal programs.

- Provide childcare consultation on health and safety to all childcare providers.

- Provide home visiting to high-risk families.

Natural Cause Fatalities In Kentucky

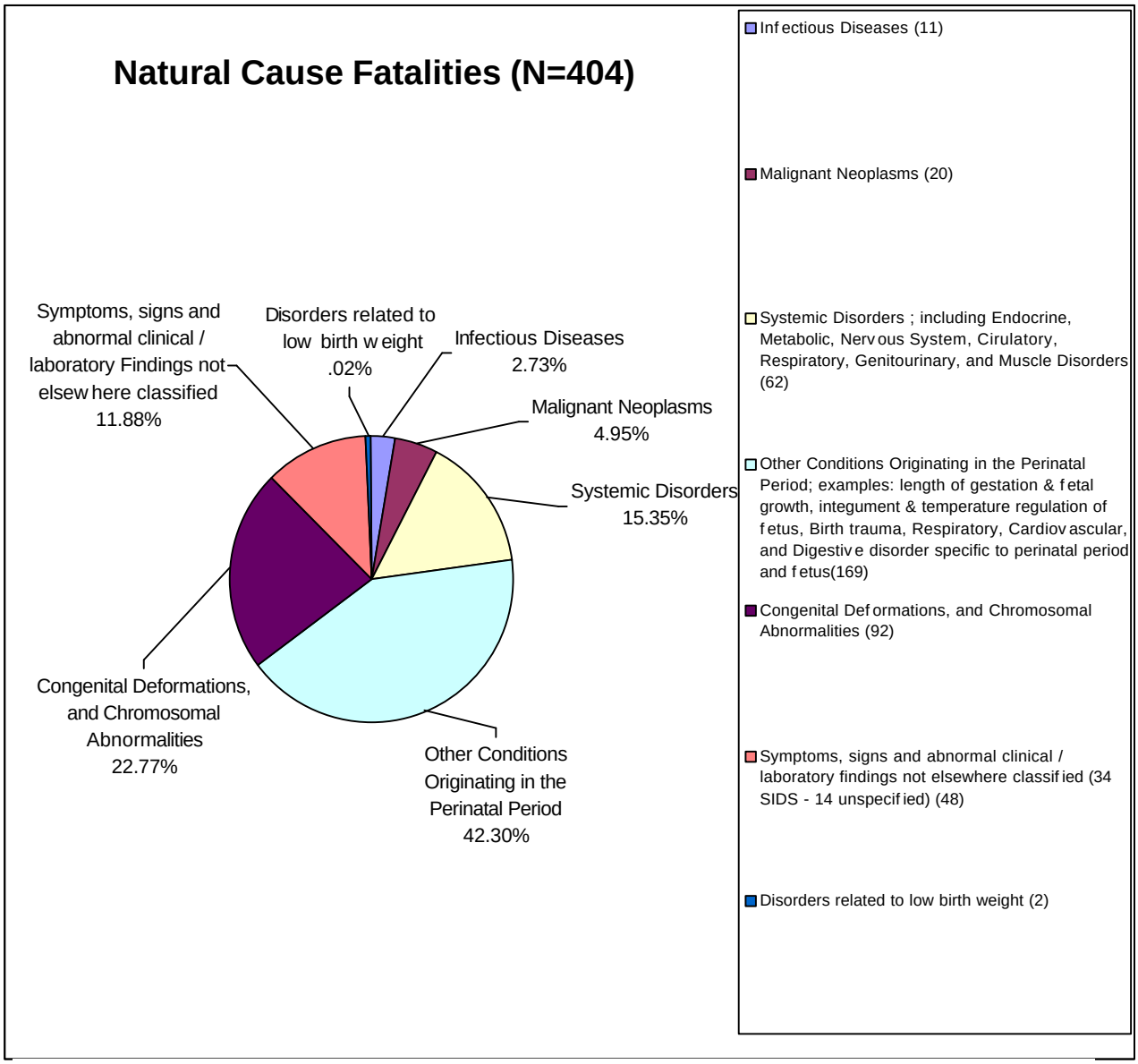
Causes of Natural Child Fatalities

In 2000 in Kentucky, 404 children died from natural causes. This represents a drop of 80 children (19.8%) from the previous year. The leading causes of natural child fatalities include: 171 infants dying of conditions originating in the perinatal period, 92 children that died of chromosomal abnormalities, and 62 children that died from systemic disorders.

The risk of poor birth outcomes is greatest among the youngest mothers, non-whites and women in lower socio-economic groups. Despite rising concerns over the consequences of prenatal exposure to tobacco, alcohol and illicit drugs, the use and abuse of these substances by pregnant women continues to be one of the most frequently missed diagnoses in perinatal medicine. The healthcare professional can overcome this deficiency through good history taking skills, a caring and non-judgmental attitude and a simple screening tool. The Division of Substance Abuse has identified such a tool, The "4P's Plus" and has made it available for use across Kentucky. It is designed to reduce shame and guilt, reduce concern about reports of using illegal drugs and reduce uneasiness for both provider and patient. Education and alternative methods of providing prenatal care must be directed at the high-risk groups for the best possible outcomes for both the mother and baby (Healthy Kentuckians 2010).

The Kentucky Agency for Substance Abuse Policy (KY-ASAP) promotes the implementation of research-based strategies that target Kentucky's youth and adults and pursues the philosophy that tobacco, in the hands of a child, is a drug abuse problem. An advisory group in each county or multi-county area of Kentucky has developed it's own strategy of substance abuse prevention and treatment.

The number of child fatalities from "Natural Causes" is reduced for this year, but efforts to make all pregnancies as healthy as possible should be encouraged. Programs like the Folic Acid Campaign are an important way to share information with the child bearing aged public. Knowing how to achieve a healthy outcome to a pregnancy is important before the pregnancy is conceived. Education is the most effective way to reduce child fatalities from natural causes.



*Low Birth weight, defined as 2500 grams of less, continues to be a challenge for Kentucky. The two deaths above were the only deaths coded, on the death certificates, to "extremely low birth weight" and "other low birth weight". However, an additional 72 deaths were coded to disorders related to length of gestation and fetal growth as reflected in "other conditions originating in the perinatal period".

Infant Mortality

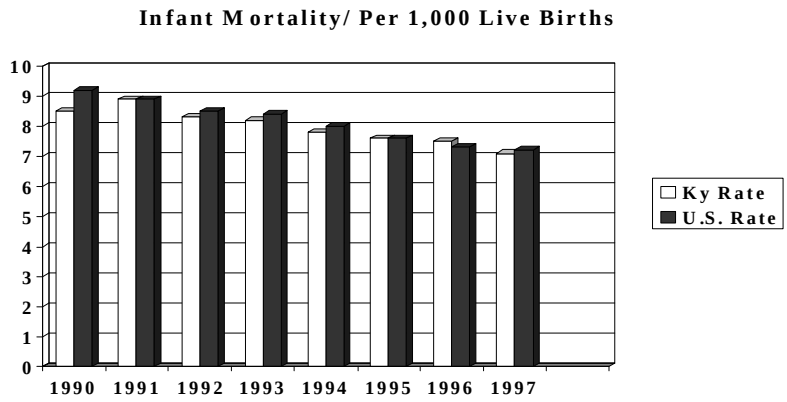
Infant Mortality

In 2000, the preliminary data indicated that the infant mortalitiy rate was 6.9 live births in Kentucky, **the lowest ever for our state.**

In 1997, the infant mortality rate (IMR) was 7.1 per 1,000 live births in Kentucky.

Between 1990 and 1997, the IMR decreased more than 16% in Kentucky.

Major contributors to infant mortality are: birth defects, pre-term births, low birthweight/ prematurity, and sudden infant death syndrome.



March of Dimes data indicates that: In Kentucky in an average week in 1997 1,023 babies are born, 164 babies are born to teen mothers, 26 babies are born to mothers who receive late or no prenatal care, 80 babies are born with very low birth weight and 7 babies die before their first birthday. Seventy five percent of infant deaths in the first month of life occur in premature infants. These data are indicative of the health status of children born in the Commonwealth; how best to address this is a problem for public health.

Further statistics derived from monitoring state maternal and infant health programs include: In 1997, 85.8% of Kentucky mothers began prenatal care in the first trimester of pregnancy. Seventy eight percent of women received adequate or adequate plus prenatal care as measured by the Adequacy of Prenatal Care Utilization Index . The 2010 objective is for the percentage to be 90.0%. Between 1990 and 1997, the population of all babies born LBW increased nearly 10% in Kentucky, 7.8% of births were low birthweight (less than 2500 grams or 5.5 lbs.). The 2010 objective is to reduce the incidence of low birth weight to 5.0 %. Infant mortality (deaths from birth to one year of age) was 7.1/1,000 live births. The 2010 objective is to reduce infant mortality to 4.5 per 1000 live births.

Fetal and Infant Mortality Review (FIMR)

Kentucky does not have a statewide FIMR process at this time. For this reason the deaths of infants less than 1 year of age are included in these data. These deaths are a concern to all of the individuals providing both prenatal and pediatric services and must be addressed. The National FIMR review program states in the FIMR publication "A Decade of Lessons Learned" that, "Infant mortality in not a health problem. Infant mortality is a social problem with health consequences." For this reason, FIMR programs should view high infant mortality rates as a broad indicator of community and family distress.

FIMR teams have a two-tiered system that leads to action following a review of cases. FIMR serves as an ongoing continuous quality control. The process goes far beyond a limited analysis of a few traditional factors, to focus on the identification of the social, economic, and system issues unique to a community that have an impact on infant morbidity and mortality. Key steps in the FIMR process include: data gathering, case review, community action, and changes in local community systems.

FIMR teams include a Community Action Team that includes two types of members, those with the political will, and financial resources to create both large and small system change and those who can define a community perspective on how best to create the desired change. As problems are resolved and health care, along with the physical and social environment for families gets better, outcomes will improve.

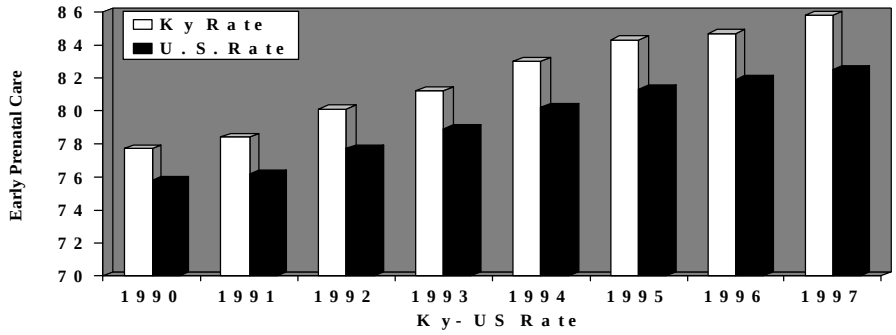
Each FIMR team will have a unique history dependent upon the location, size, economy and diversity of the population, the sponsor of the team, the composition of the team, and the issues that face the community. Kentucky has a distinct set of problems facing the child bearing community; the FIMR process can be highly a effective means to address these issues. Without this process in place the deaths of infants under one year of age and fetal demise must be addressed by the Child Fatality Review system.

These factors have been shown to contribute to adverse perinatal outcomes. This is how Kentucky compares to the United States.

(Smoking Data 1999, Poverty Data 1998)

1998 Population	Ky.	US
Women ages 15-44 below the Federal Poverty Level	14.6%	14.5%
Children under age 18 below the Federal Poverty Level	18.6%	18.9%
Females who smoke	25.9%	22.9%
Males who smoke	33.9%	25.3%

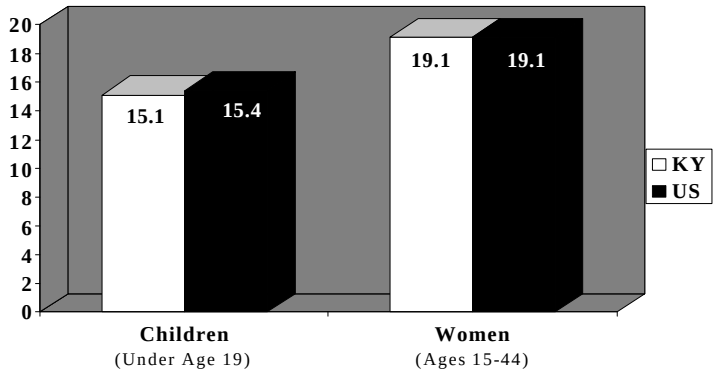
Early Prenatal Care



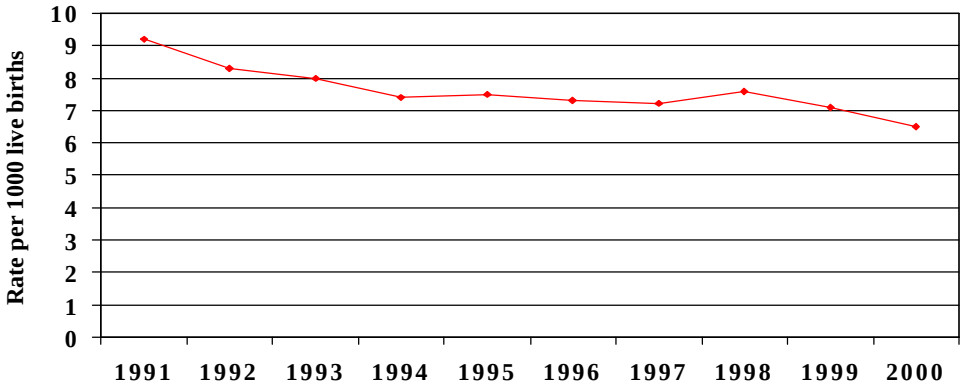
In Kentucky, 15.1% of children (under age 19) and 19.1% of women (ages 15-44) did not have health insurance during 1996-1998, compared to more than 15% of children and more than 19% of women for the US.

Medicaid and the State Children's Health Insurance Program (SCHIP) are federal health insurance programs funded and operated jointly with the state. In Kentucky the plan is known as the Kentucky Children's Insurance Program (KCHIP). States may use SCHIP funds to provide coverage for children ages 1 through 18 up to 150% of poverty. A separate SCHIP plan covers children not eligible for Medicaid or other insurance up to 200% of poverty.

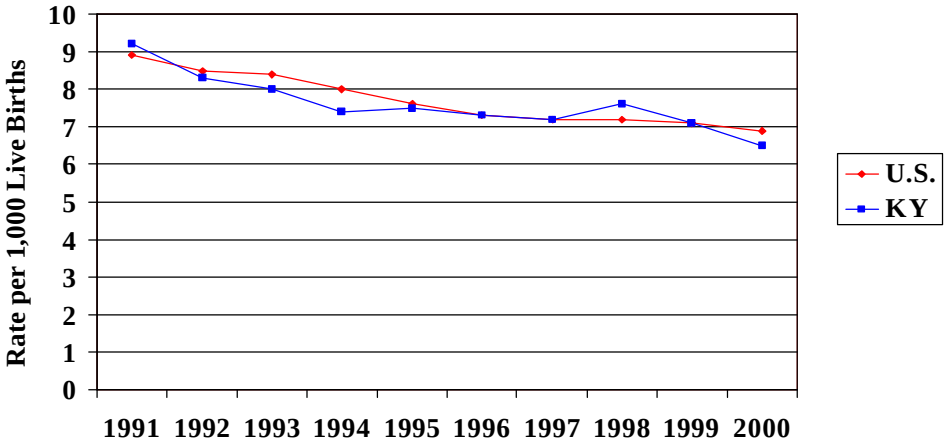
Uninsured Children & Women



1991-2000 Kentucky Infant Mortality Rates; Kentucky Vital Statistics Death Certificate Files

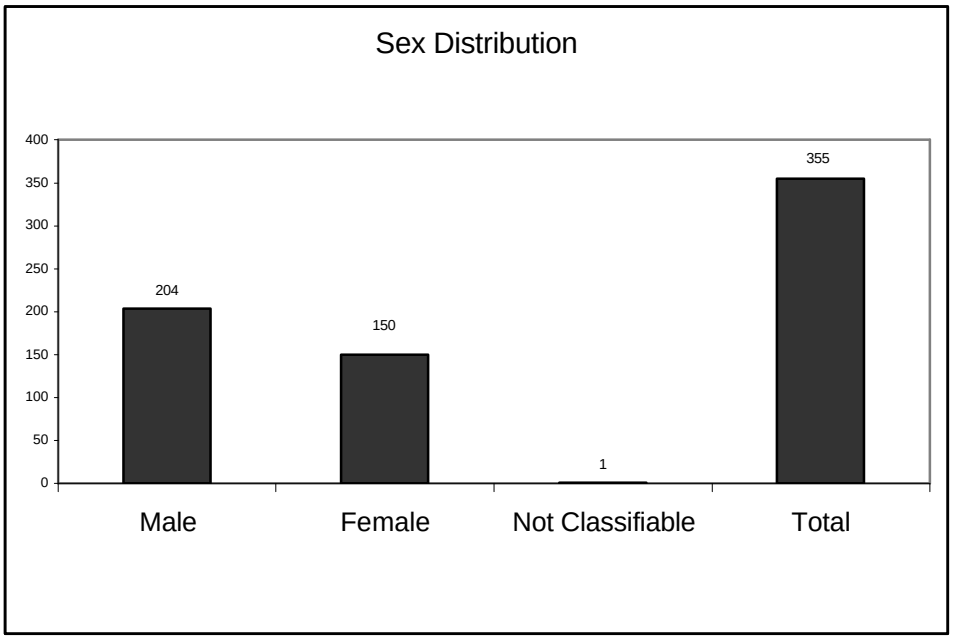


Infant Mortality Rates per 1,000 Live Births; United States and Kentucky, 1991-2000*

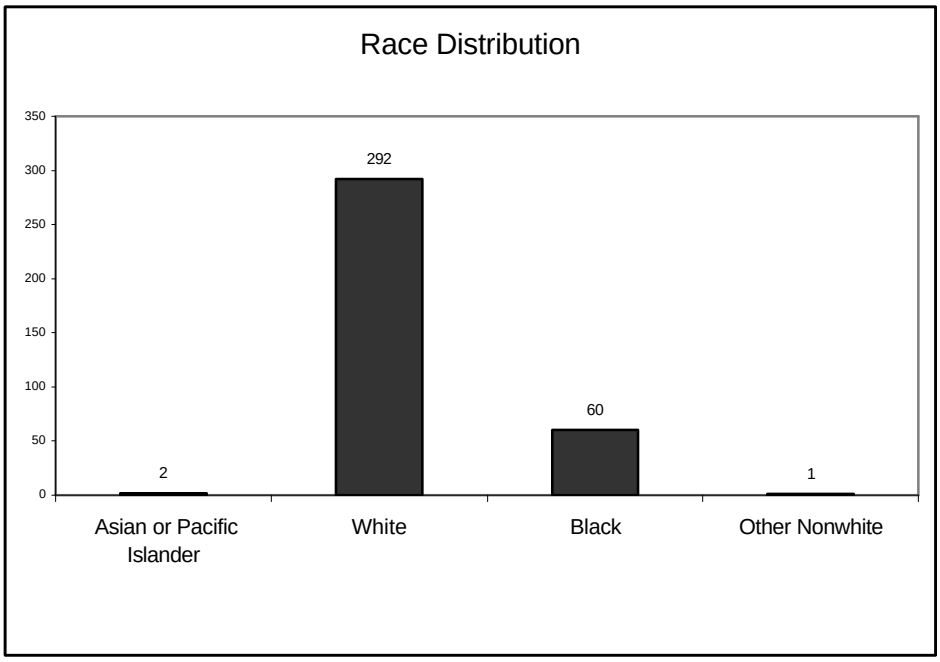


*Data for 2000 is preliminary

Infant Mortality in Kentucky (N=355)



- Two hundred four (57.5%) infants that died <1 year old were male.
- One hundred fifty (42.3%) were females.
- One (0.2%) did not have sex noted.



- Two hundred and ninety two (82.3%) infants that died < 1 year were white.
- Sixty (16.9%) were Black.
- One (0.2%) was other nonwhite
- Two (0.6%) were Asian or Pacific Islander.

Infant Mortality Rates* by Race; Kentucky Vital Statistics Files, 1991-2000

Year	White	Black
1991	8.5	15.5
1992	7.8	12.6
1993	7.4	14.1
1994	6.8	13.5
1995	7.2	10.7
1996	6.8	13.0
1997	7.0	10.8
1998	6.9	15.4
1999	6.7	12.3
2000	5.8	11.9

*Rates are per 1,000 Live Births

MCH Terminology….. Definitions to know

(Definitions from the Healthy Kentuckians 2010 Objectives, Spring 2000 and Guidelines for Perinatal Care 4th edition).

Fetal Death:	The death of a fetus in utero (prior to delivery) at 20 weeks or more gestation.
Fetal Death Rate:	The number of fetal deaths of a population divided by the total number of live births and fetal deaths in the same population during the same time period.
Neonatal Death	Death of a liveborn neonate before the neonate becomes 28 days old (up to and including 27 days, 23 hours, and 59 minutes from the moment of birth).
Infant Mortality	Any death at any time from birth up to, but not including ,1 year of age (364 days, 23 hours, and 59 minutes from the moment of birth).
Infant Death	Death of an infant less than 1 year old.
Low Birthweight:	Any neonate, regardless of gestational age, whose weight at is less than 2,500 grams (5.5 pounds).
Maternal Death:	Death of a woman while pregnant or within 42 days following the end of a pregnancy, from any cause related to or aggravated by the pregnancy or the management of the pregnancy. Does not include accidental deaths.
Maternal Mortality Rate:	The number of maternal deaths for every 100,000 live births.
Neonatal Mortality:	Death of an infant less than 28 days after birth.
Perinatal Mortality Rate:	Indices of perinatal mortality combine fetal deaths and live births with only a brief survival time (up to a few days or weeks).
Postneonatal Mortality:	Death of an infant between 28 days and 1 year after birth.

Postneonatal Period:	The time period from an infant's 29th day of life until the first birthday.
Postpartum:	The 6-week period immediately following birth.
Premature Birth:	Any neonate whose birth occurs through the end of the last day of the 37th week (259th day) following the onset of the last menstrual period.
Very Low Birthweight:	A newborn weighing less than 1500 grams (3 pounds 5 ounces) at birth.

Causes

Birth Defect Fatalities

Joyce Robl contributed the following information to the Child fatality Report. Ms. Robl has a Master of Science Degree in Human Genetics from the University of Michigan and is a Board Certified Genetic Counselor. Ms. Robl currently is working toward a PhD at the University of Kentucky and works at the Department for Public Health in Frankfort, Kentucky with the Kentucky Birth Surveillance Registry.

Birth Defect Fatalities

Birth defects are a leading cause of morbidity and mortality in the United States. For more than 20 years, birth defects have been the leading cause of infant mortality accounting for more than one in five deaths. While there have been significant advances in other causes of infant mortality, there has not been a significant decline in those infant deaths caused by birth defects.

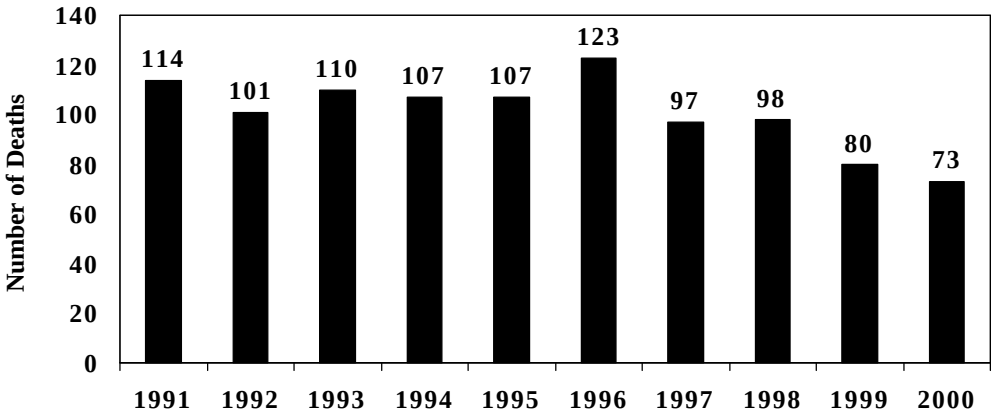
Nationally, it is estimated that one in thirty-three babies has a birth defect. Kentucky specific information will soon be available from the Kentucky Birth Surveillance Registry (KBSR). KBSR is a statewide system to identify children from birth to five years of age with birth defects or disabling conditions. This information can then be analyzed to identify patterns of birth defects in Kentucky.

The economic costs of medical conditions such as birth defects often do not include an understanding of how these conditions affect the lives of infants born with them and the impact on their families and communities. The American Academy of Pediatrics has estimated that the total lifetime cost of caring for a typical child with fetal alcohol syndrome may be as high as $1.4 million.[1] Fetal alcohol syndrome is 100% preventable.

There are multiple causes for birth defects, which has made prevention a difficult issue. The availability of comprehensive preconception counseling for women of childbearing age can have a significant preventive effect. One important example has been the finding that daily consumption of 400 micrograms of folic acid by women of childbearing age can reduce the risk for neural tube defects (serious birth defects of the brain and spine) by up to 70%. Other birth defects such as fetal alcohol syndrome and diabetic embryopathy may also show a significant reduction with preconception health promotion.

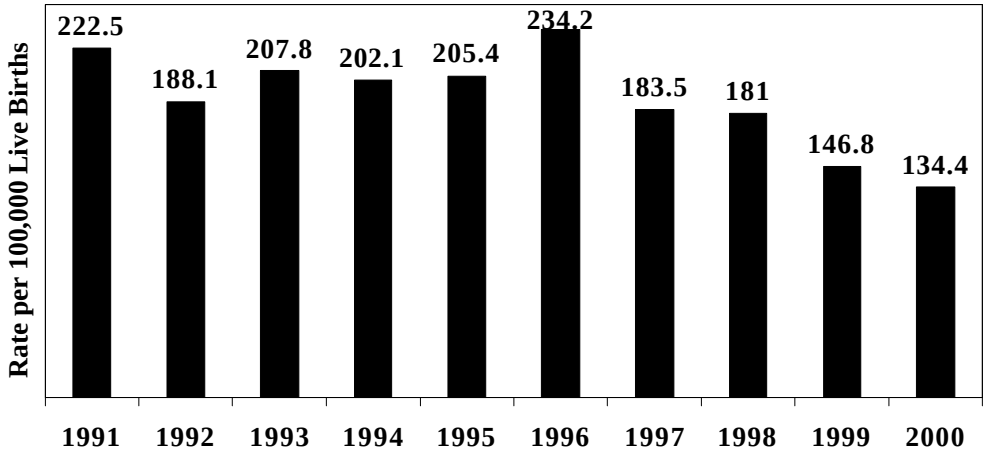
[1]American Academy of Pediatrics Committee on Substance Abuse and Committee on Children with Disabilities (2000): Fetal alcohol syndrome and alcohol-related neurodevelopmental disorders. Pediatrics 106: 358-361.

Total Number of Infant Deaths Due to Birth Defects*; Kentucky Vital Statistics Files, 1991-2000



*Based on ICD9 Codes 740-759 and ICD10 Codes Q00-Q99

Infant Mortality Rates* Due to Birth Defects**; Kentucky Vital Statistics Files 1991-2000



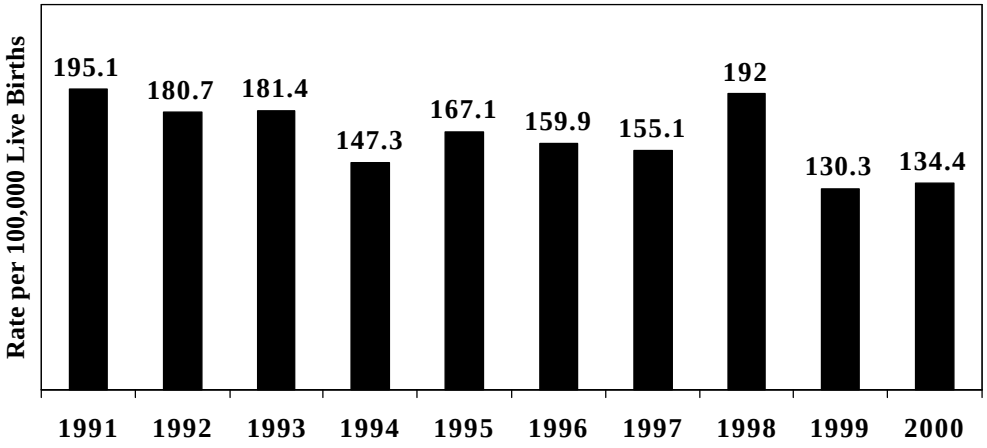
*Rates are per 100,000 Live Births

**Based on ICD9 Codes 740-759 and ICD10 Codes Q00-Q99

Pre-Term and Low Birth Weight Fatalities

Known risk factors for low-birthweight include: previous LBW birth, preterm delivery, multiple births, short interpregnancy interval, smoking, and substance abuse.

Infant Mortality Rate* Due to Pre-Term and Low Birth Weight**; Kentucky Vital Statistics Files, 1991-2000



*Rates are per 100,000 Live Births

**Based on ICD9 Codes 765.0-765.9 and ICD10 Codes P07.0-P07.9

Prevention Measures

- Implement plans for comprehensive health education that include age-appropriate reproductive health information.
- Develop new strategies for sharing reproductive awareness with all individuals of child bearing age.
- Improve pregnancy outcomes by providing early confirmation testing.
- Emphasize risk reduction and family planning in reproductive health care.
- Make early risk assessment a component of prenatal care.
- Provide perinatal care through the first year of life with access to pediatric care.
- Increase accessibility to affordable prenatal care by extending hours and offering services in non-traditional settings.
- All women of child bearing age should take 400 micrograms of folic acid daily.
- Provide home visiting services to at-risk families.

Sudden Infant Death Syndrome Fatalities

The American Academy of Pediatrics defines Sudden Infant Death Syndrome (SIDS), also referred to as crib or cot death as, "the sudden death of an infant under the age of 1 year which remains unexplained after thorough case investigation, including the performance of a complete autopsy, examination of the death scene, and review of the clinical history." Eighty percent of cases occur before 5 months of age, with the peak incidence between 2 and 4 months of age. Despite nearly 3 decades of intensive study, the etiology of SIDS is still unknown. There is no diagnostic test for SIDS. Research is focusing on sleep apnea, arousal mechanisms, infections, infant medications, sleeping position, allergies, metabolic disease, chronic hypoxia, and autonomic instability. Many causes of SIDS have been postulated and have remained either unconfirmed or have been disproved.

Unfortunately, many factors associated with the higher risk of sudden infant death are also associated with an increased risk of child abuse and other causes of infant mortality. Risk factors include:

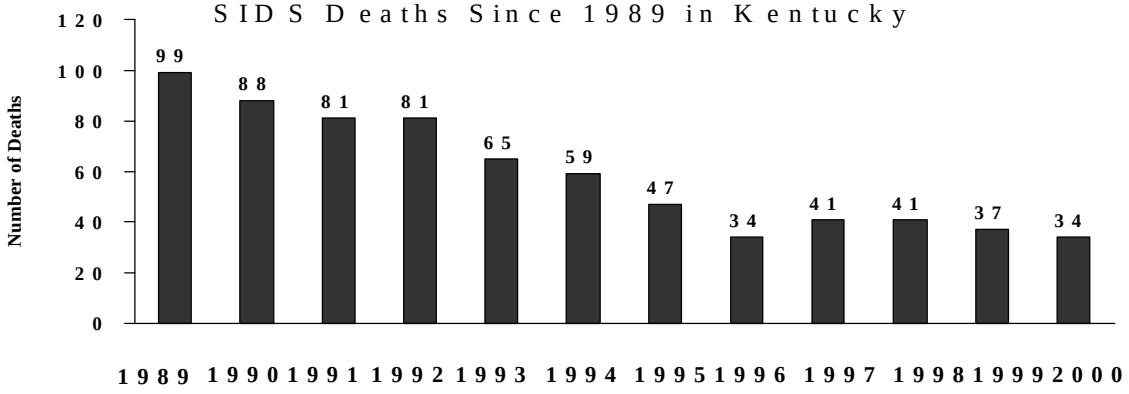
Low socioeconomic status;
An unmarried mother;
Maternal age younger than 20 years at first pregnancy and younger than 25 years during subsequent pregnancies;
Maternal smoking during pregnancy;
Illicit drug use during pregnancy;
Inadequate prenatal care;
An interval of less than 12 months since the preceding pregnancy;
Prematurity;
Low birth weight;
Low APGAR score;
Prone sleeping position.

The typical presentation in SIDS is the sudden unexpected death of a seemingly healthy infant. SIDS deaths are more common during the winter months. The infant may have been suffering from a mild upper respiratory or gastrointestinal infection, and fed before taking a nap or sleeping for the night. After some hours unobserved, the infant is found dead. Death is silent and occurs during sleep.

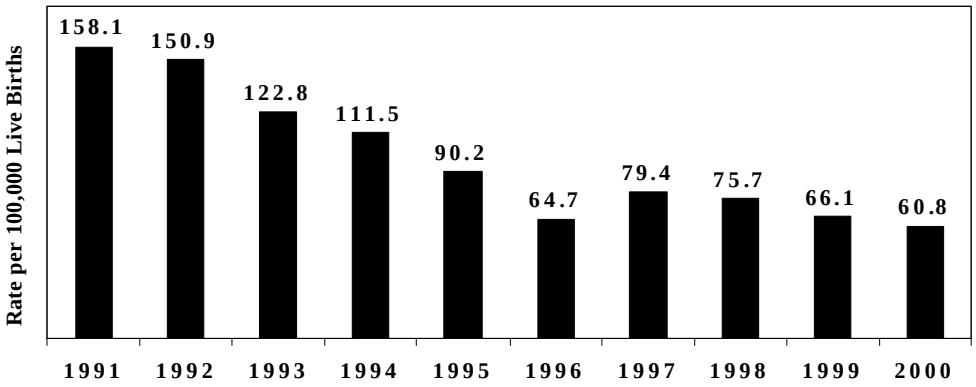
The American Sleep Disorders Association and Sleep Research Society states that many researchers agree that SIDS is a multifactorial disorder and that SIDS victims do not share a common etiology, although failure to arouse from sleep to cope with homestaic challenges may be the final common pathway. James McKenna of the Department of Sociology and Anthropology at the University of California School of Medicine, states in the article "Evolution and Infant Sleep: An Experimental Study of Infant-Parent Co-Sleeping and Its Complications for SIDS" that, the human infant is one of the least neurologically mature mammals at birth. Fully 75% of human brain growth occurs postnatally. As a consequence of its immaturity, the human infant is forced to rely on external regulation and

support, especially in the first year of life. During the neonatal period, respiration is largely controlled by the brainstem centers, as are most bodily functions. As the forebrain connections develop the cortex takes over this regulation. Some researchers think that SIDS deaths may occur in the critical period of transition of the brainstem control of respiration response to the cortex.

Harold Pollack, PhD. writes that Sudden Infant Death Syndrome remains the most prevalent cause of postnatal infant mortality in the United States. Reported SIDS incidence in the United States has declined sharply since 1989. The most important cause of this decline appears to be public education such as the "Back to Sleep" campaign.



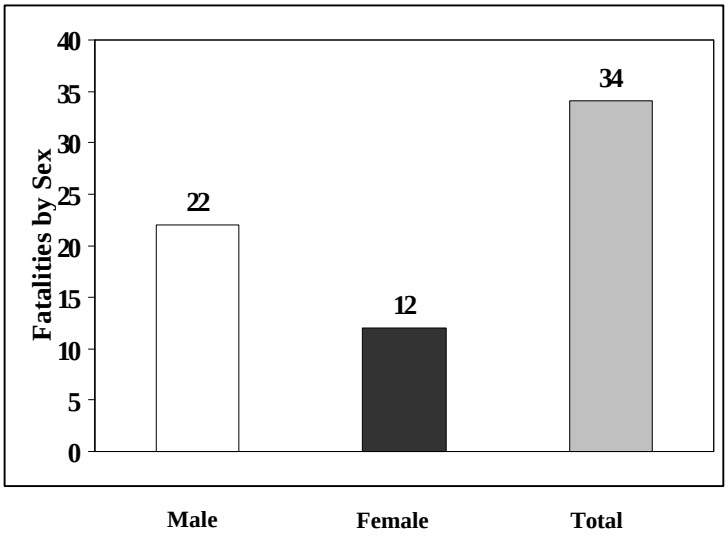
Infant Mortality Rate* Due to SIDS**; Kentucky Vital Statistics Files, 1991-2000



*Rates are per 100,000 Live Births

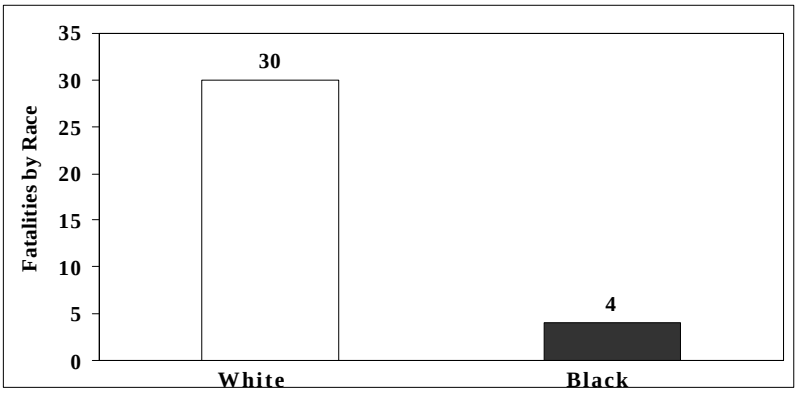
**Based on ICD9 Code 798.0 and ICD10 Code R95

SIDS Fatalities (N=34)



- Twenty two (64.7%) SIDS Fatalities were males.
- Twelve (35.3%) SIDS fatalities were female

Race Distribution



- Thirty (88.2%) SIDS fatalities were whites.
- Four (11.8%) SIDS Fatalities were black.

Prevention Measures

- Continue to emphasize the "Back to Sleep Campaign", with special attention to the disperate populations. Provide literature, whenever possible in native language to the population.

- Focus health teaching about the effects of tobacco and drug use both during pregnancy and the first year of a child's life to young expectant parents.

- Keep parents informed about the BEST sleeping arrangement for their infant, including position, temperature and bedding.

- Provide home visiting to at risk families.

Child Fatalities by County In Kentucky

COUNTY	UNKNOWN	DROWNING	FIRE/BURN	HOMICIDE	SIDS	SUFFOCATION	MVA	NATURAL	OTHER	SUICIDE	COUTNY TOTALS
ADAIR								2			2
ALLEN											0
ANDERSON		1					1				2
BALLARD											0
BARREN								3			3
BATH							2	1			3
BELL								2			2
BOONE					2			2			4
BOURBON						1		1			2
BOYD					1		2	6			9
BOYLE							1	2			3
BRACKEN					1			2			3
BREATHITT					1		3	2			6
BRECKINRIDGE								2			2
BULLITT					1			4			5
BUTLER								2			2
CALDWELL							2				2
CALLOWAY					1	1	1	2			5
CAMPBELL		1					2	3	1		7
CARLISLE									1		1
CAROLL							2	1	1		4
CARTER											0
CASEY							1	2			3
CHRISTIAN	4	1	3	2			3	10			23
CLARK				1			1	2			4
CLAY						1		2			3
CLINTON								1			1
CRITTENDEN											0

COUNTY	UNKNOWN	DROWNING	FIRE/BURN	HOMICIDE	SIDS	SUFFOCATION	MVA	NATURAL	OTHER	SUICIDE	COUNTY TOTAL
CUMBERLAND							1	1			2
DAVIESS					2		3	15			20
EDMONSON											0
ELLIOTT							1	1			2
ESTILL					1		2	1			4
FAYETTE				1			4	39			44
FLEMING							3				3
FLOYD							2	2	3		7
FRANKLIN		1			1			3			5
FULTON							1	3			4
GALLATIN								1			1
GARRARD								1			1
GRANT								1			1
GRAVES		1					2				3
GRAYSON		1		1	1	1		1			5
GREEN									1		1
GREENUP							1	1			2
HANCOCK											0
HARDIN	1				1	2	3	8	1	1	17
HARLAN							1	2			3
HARRISON						1				1	2
HART							2	2			4
HENDERSON	1					1		2			4
HENRY					1		1				2
HICKMAN								1			1
HOPKINS						1	3		1		5
JACKSON		1					1				2
JEFFERSON	4		5	10	3	5	7	78	1	3	116

COUNTY	UNKNOWN	DROWNING	FIRE/BURN	HOMICIDE	SIDS	SUFFOCATION	MVA	NATURAL	OTHER	SUICIDE	COUTNY TOTALS
JESSAMINE				1				2			3
JOHNSON							1	2			3
KENTON					1			5	1	2	10
KNOTT							2	1			3
KNOX						1	1	5			7
LARUE						1			1		2
LAUREL							4	9			13
LAWRENCE							1			1	2
LEE								2			2
LESLIE							1	1			2
LETCHER							1	4			5
LEWIS							1		1		2
LINCOLN						1					1
LIVINGSTON						1		1			2
LOGAN				1			1				2
LYON							1	1			2
MCCRACKEN		1					4	5	1	1	12
MCCREARY							3	1			4
MCLEAN					1						1
MADISON					1		1	5			7
MAGOFFIN								1			1
MARION								3			3
MARSHALL								1			1
MARTIN								2			2
MASON			1		1			3			5
MEADE					1		2	2			5
MENIFEE											0
MERCER							3	2			5

COUNTY	UNKNOWN	DROWNING	FIRE/BURN	HOMICIDE	SIDS	SUFFOCATION	MVA	NATURAL	OTHER	SUICIDE	COUNTY TOTAL
METCALFE											0
MONROE								1	1		2
MONTGOMERY		1		1			1	3			6
MORGAN					2		1	1			4
MUHLENBERG							1	2			3
NELSON		1					4	3	2	1	11
NICHOLAS							1	1			2
OHIO								3			3
OLDHAM	1	1				1		5			8
OWEN											0
OWSLEY											0
PENDLETON											0
PERRY					1		1	2			4
PIKE	1				4		1	9	1		16
POWELL			1		1						2
PULASKI							1	4			5
ROBERTSON											0
ROCKCASTLE								3			3
ROWAN							2				2
RUSSELL		1					1	2			4
SCOTT	2	1	1				3	2		1	10
SHLEBY								6			6
SIMPSON								4			4
SPENCER											0
TAYLOR							1				1
TODD				1				2			3
TRIGG								2			2
TRIMBLE											0

COUNTY	UNKNOWN	DROWNING	FIRE/BURN	HOMICIDE	SIDS	SUFFOCATION	MVA	NATURAL	OTHER	SUICIDE	COUTNY TOTALS
UNION								2			2
WARREN					1	1	1	8			11
WASHINGTON		1					2	1			4
WAYNE								2			2
WEBSTER								4		1	5
WHITLEY		2		2			1	3		1	9
WOLFE								2			2
WOODFORD						1	2	5			8
GRAND TOTAL	**14**	**17**	**11**	**21**	**34**	**18**	**110**	**356**	**17**	**13**	**611**

Accomplishments

Accomplishments

This year has been productive for the state team, but it has been sad for us also. We have lost some of the original members of the team. The loss means we need to replace the expertise and dedication of these individuals with new members.

Accomplishments for the past year include:

- Shared CFR information at Coroner Trainings.
- Increased levels of reporting from local coroners.
- Continued funding from the Division of Maternal and Child Health (MCH) for the formation of local teams.
- Updated educational materials about Child Fatality Review and shared materials with local communities.
- Visited local community groups and presented educational material about the child fatality review process.
- Began refining the Coroner Reporting Form to update and make the form more user friendly.
- Updated the Multi-Disciplinary Guide for Child Fatality Review.
- Began the process of writing an Administrative Regulation to give more information to coroners about the correct way to complete the Coroner's Reporting Form.
- Updated the data collection system for all of the programs in MCH including the Child Fatality Review database.
- Strengthened communication and cooperation between various state and local agencies that involved in the child fatality review system.

Recommendations

Recommendations

- Complete the work on the data collection system to integrate more fully the CFR data.
- Promulgate the administrative regulation relating to the Coroner Report Form.
- Edit the changes to the Coroner Reporting Form to clarify the process for completing the form.
- Continue to participate in the training sessions for coroner's as requested by the State Medical Examiner's Office.
- Continue to provide funding for the formation of a greater number of local Child Fatality Review Teams.
- Continue to educate new coroner's about the law requiring that the three agencies noted on the coroner report form are to notified about the death of a child.
- Provide grief counseling training to enable local health department staff to provide this service to all parents who lose children.
- Continue to provide health professionals and the public with information designed to help decrease preventable child fatalities.

County Health Department Contacts

County Contacts

Coroners in Kentucky are required to contact the local health department, law enforcement, and Community Based Services offices about the death of a child. These agencies are to share any information about prior services to the child and family. The most current list of contacts for the counties is included on the next pages.

County Health Department Contacts

Adair

Virgie Claycomb RN, AANP

Allen

Gayle Spencer, RN

Anderson

Bobbi Darnell
Phone: 502-839-4551

Ballard

Diane Crice, RN
PO Box 357
La Center, KY 42056

Barren

Peggy Burcham (Barren County Health Department)
Center Coordinator
Phone: 270-651-8321 ext. 122
E-mail: PeggyK.Burcham@mail.state.ky.us

Bath

James R. Ratliff, Director
P. O. Box 555
Owingsville, Ky. 40360

Bell

Jessica Mills ARNP
Bell County Health Department
310 Cherry Street
Pineville, KY 40977
Phone: 606-337-7048

Boone

Danny Greene, Interim Director
610 Medical Village Drive
Edgewood, Ky. 41017

Bourbon

Teresa Marsh (Communication problems with coroner)

Boyd

Marty Vannatter, RN Nursing Administrator
Rhonda Woolum, RN Grief Counselor

Boyle

Roger Trent, Director
448 South Third Street
Danville, Ky. 40422

Bracken

Gladys Wagel
Bracken County Health Department
429 Frankfort St.
P.O. Box 117
Brooksville, KY 41004
Phone: 606-735-2157

Breathitt

Shelia Sharpe, Director
359 Broadway
Jackson, Ky. 41339

Breckinridge

Cindy Bandy, RN Health Administrator
Staff Nurse
2nd Contact: Mary O'Reilly Basham Staff Nurse

Bullitt

Ned Fitzgibbons, Director
181 Lees Valley Road
Shepherdsville, Ky. 40165

Butler

C. Frank Brown, Director
1133 Adams Street
Bowling Green, Ky. 42102-1157

Caldwell

Don Robertson, Director
P.O. Box 579
Eddyville, Ky. 42039

Calloway

Charlie Ross, Director
916 Kentucky Ave.
Paducah, Ky. 42002-2357

Campbell

Danny Greene, Director
610 Medical Village Drive
Edgewood, Ky. 41017

Carlisle

Charlie Ross, Director
916 Kentucky Ave.
Paducah, Ky. 42002-2357

Carroll

Anna Katherine Mefford

Carter

Ellen Blevins RN Nursing Supervisor
Little Sandy District Health Department
P.O. Box 909
Grayson, Ky. 41143
606-474-6685
Fax 606-787-6911

Casey

Casey County Health Department
Susan Hopkins, LPN
Karen Watson– Wethington, LPN
Phone: 606-787-6911

Christian

Anita Simmons, Director
1700 Canton Street
Hopkinsville, Ky. 42240

Clark

Ruth Davis
2nd contact Len Midden

Clay

Kathy Fields

Clinton

Kathy Bernard

Crittenden

Don Robertson, Director
P.O. Box 579
Eddyville, Ky. 42039

Cumberland

Sandra Hoots, RN, BSN

Daviess

Angela Woosley, RN, BSN

Edmonson

C. Frank Brown, Director
Barren River District Health Dept.
1133 Adams Street
Bowling Green, Ky. 42102-1157

Elliott

Ellen Blevins RN Nursing Supervisor
Little Sandy District Health Dept.
P.O. Box 909 Grayson, Kentucky 41143
606-474-6685 Fax 606-474-0256

Estill

Tim Gould, Director
River Drive; Hwy. #52
P.O. Box 115
Irvine, Ky. 40336

Fayette

John Poundstone
LHD Lexington– Fayette Co.

Fleming

Vicki Watson Administrative Coordinator
Fleming County Health Dept.
Flemingsburg, Ky. 41041

Floyd

Jeannie D. Lafferty, RN
Floyd County Health Dept.
144 North front Ave.
Prestonsburg, Ky. 41653

Franklin

Ann Ratliff, RN
Senior Community Health Nurse
502-564-7647

Fulton

Charlie Ross, Director
916 Kentucky Ave.
Paducah, Ky. 42002-2357

Gallatin

Kathy Mefford, Director
Three District Health Dept.
327 North Main Street
Owenton, Ky. 40359-1409

Garrard

Renee Davis, Nursing Supervisor
89 Farra Drive
Lancaster, Ky. 40444
(859)-792-2153

Grant

Danny Green, Interim Director
610 Medical Village Drive
Edgewood, Ky. 41017

Graves

Jimmye Saunders, RN, Nursing Supervisor
100 Lochridge
Mayfield, Ky. 42066
Phone: 270-247-3553

Grayson

Grayson County Health Department
Sandy Clark, RN
Phone: 270-259-3141
2nd Contact Sue Vincent, RN Clinical Director
** No notification from the county coroner, only from Frankfort.

Green

Shelia Lobb, RN, ARNP

GreenUp

Ruby Bruce
Greenup County Health Dept.
Phone: 606-473-9838
2nd Contact Nannette Stevens, RN Nursing Supervisor
3rd Contact Chris Garthee RN Assistant Nursing Supervisor

Hancock

Angela Woosley, RN
Green River District Health Dept.
(270)-852-5468

Hardin

Linda Sims, Director
Lincoln Trail District Health Dept.
1222 Woodland Drive
Elizabethtown, Ky. 42702-2609

Harlan

Bobbie Crider, RN
CHN Supervisor
402 East Clover Street
Harlan Ky. 40831

Harrison

Julie McKee, director
Wedco District Health Dept.
Cynthiana, Ky. 41031

Hart

Mary Coakley
Hart County Health Dept.
Community Health Nurse Supervisor

Henderson

Angela Woosley
Green River District Health Dept.
(270)-528-5468

Henry

Renee Blair, Director
225 Midland Trail
Shelbyville, Ky. 40065

Hickman

Charlie Ross, Director
916 Kentucky Ave.
Paducah, Ky. 42002-2357

Hopkins

Carolyn Clark
Phone: (270)- 824-5242

Jackson

Diana Hisel, Nursing Supervisor
Jackson County Health Dept.
McKee, Ky. 40447
Phone: (606)-287-8421 Fax: (606)287-4199

Jefferson

Dr. Violanda Grigorescu, Epidemiologist, Planning and Research Department

Jessamine

Nancy M. Crew, Director
215 East Maple Street
Nicholasville, Ky. 40356-1203

Johnson

Brian Ann Music, CHN Supervisor
Johnson County Health Department

Kenton

Danny Greene, Interim Director
610 Medical Village Drive
Edgewood, Ky. 41017

Knott

Glenda L. Shrum, Coordinator
Knott County Health Center
P.O. Box 530
880 West Main Street
Hindman, KY 41822
Phone: 606-785-3144
Fax: 606-785-5512
E-mail contact through LHD-Kentucky River District

Knox

Randy Canady, Director
Liberty street
P.O. Box 1689
Barbourville, Ky. 40906-0897

LaRue

Joyce Walsh, RN
Nursing Supervisor
LaRue County Health Department

Laurel

Ruth P. Gaines
Laurel County Health Department
London, KY 40741
Phone: 606-864-5187

Lawrence

Phyllis Ward, RN Grief Counselor

Lee

Karen Cooper, Director
441 Gorman Hollow Road
Hazard, Ky. 41701

Leslie

Jean Hoskins
78 Maple Street
PO Box 787
Hyden, KY 41749
E-mail: Ruby.P.Campbell@mail.state.ky.us

Letcher

Karen Cooper, Director
441 Gorman Hollow Road
Hazard, Ky. 41701

Lewis

Kathleen Ginn, Director
905 Fairlane Dr.
Vanceburg, Ky. 41179

Lincoln

Health Avenue
P.O. Box 165
Stanford, Ky. x40484

Livingston

Linda Belt
Livingston County Health Dept.
(270)-928-2193

Logan

C. Frank Brown
1133 Adams Street
Bowling Green, Ky. 42102-1157

Lyon

Don Robertson, Director
P.O. Box 579
Eddyville, Ky. 42039

McCracken

Genet Davenport, RN, BSN
Nursing Supervisor
Phone: 270-444-9631

McCreary

Pam King, LPN

McLean

Angela Woosley, RN
Green District Health Dept.
(270)-852-5468

Madison

Jennifer Tipton
Sr. Community Health Nurse
Phone: 859-623-1726

Magoffin

Kathy Henbree, RN
Community Health Nursing Administrator

Marion

Linda Sims, Director
1222 Woodland Drive
Elizabethtown, Ky. 42702-2609

Marshall

B.J. Weathers
Marshall County Health Department

Martin

Phyllis Campbell, RN

Mason

Tim Stump, Director
120 West Third Street
Maysville, Ky. 41056

Meade

Meade County Health Department Child Fatality Member
Terry Miller, RN

Menifee

Jo Anne Egelston, RN
Community Health Nurse Supervisor

Mercer

Jackie Wagner, RN
Nursing Supervisor

Metcalfe

Catherine Tinnell, RN
Also can contact Barren County team

Monroe

Charlotte Turner, Administrator
Monroe County Health Department
Tompkinsville, Ky. 42167

Montgomery

Sharon Owen, RN
Nurse Administrator

Morgan

Teresa Wallin, RN Nursing Supervisor
Morgan County Health Department
493 Riverside Drive
West Liberty, KY 4142

Muhlenberg

Jeanette L. Williams, Public Health Administrator
Muhlenberg County Health Department
P.O. Box 148, 105 Legion Drive
Central City, KY 4233
Phone: 270-757-0790
Fax: 270-757-0099
JeanetteL.Williams@mail.state.ky.us

Nelson

Lucy Brown, RN
325 South Third Street
Bardstown, KY 40004

Nicholas

Donna Clifford, RN
Nicholas County Health Center
2320 Concrete Rd.
Carlisle, KY 40311
Phone: 859-289-2188
Center coordinator

Ohio

Angela Woosley, RN
Green District Health Dept.
(270)-852-5468

Oldham

Karen Baughman, RN
Oldham County Health Department

Owen

Patty Greene

Owsley

Karen Cooper, Director
441 Gorman Hollow Road
Hazard, Ky. 41701

Pendleton

Kathy Mefford, Director
327 North Main Street
Owenton, Ky. 40359-1409

Perry

Melda Sue Vanover, RN
Lead Nurse, Health Department Coordinator

Pike

Shelia Logan
Pike County Health Department

Powell

Mary Abney, RN
E-mail: Use Darlene Richardson's address

Pulaski

Donna Turner, RN

Robertson

Tim Stump, Director
120 West Third Street
Maysville, Ky. 41056

Rockcastle

Rockcastle County Health Center
Diana Napier, RN
Nursing Supervisor
2nd Contact: Hazel Parker
Clinical Supervisor

Rowan

Tim stump, Director
120 West third Street
Maysville, Ky. 41056

Russell

Carolyn Bicknell, RN

Scott

Julie Mckee, Director
WEDCO District Health Dept.
Cynthiana, Ky. 41034

Shelby

Renee Blair, Director
225 Midland Trail
Shelbyville, Ky. 40065

Simpson

Kathy Speevack, RN (Center Coordinator)
Simpson County Health Department
1131 South College Street
Franklin, KY 42134
Phone: 270-586-8261
Fax: 270-586-8264
2nd Contact: Fredia Wingfield (same location)

Spencer

Renee Blair, Director
225 Midland Trail
Shelbyville, Ky. 40065

Taylor

Ruthie Bender, RN Supervisor
407 East First Street
Campbellsville, KY 42718
Phone 270-465-4191

Todd
Theresa Stevens, Community Health Nurse
Todd County Health Department

Trigg
Don Robertson, Director
P.O. Box 579
Eddyville, Ky. 42039

Trimble
Renee Blair, Director
225 Midland Trail
Shelbyville, Ky. 40065

Union
Leslie Wheatly
P.O. Box 88
Morganfield, Ky. 42437
(270) 389-1230

WashingtonMary Ann Jones, RN, Clinical Director
2nd Contact: Margaret Wimsatt, PSSA (Registrar)
Washington County Health Department

Wayne
Faye Dulcamp, RN

Webster
Carolyn Burnett, RN
Webster County Health Department Supervisor
Phone: 270-639-9315
Fax: 270-639-7866

Whitley
Maxine Kreis, RN Nursing Supervisor
Community Health Nurse, Grief Counselor, Member of local CFR/FIMR Team
Whitley County Health Department
2nd contact: Peggy Henderson, MSW, Grief Counselor, CFR/FIMR Team, Healthy Start Project Director

Wolfe
Wolfe County Health Center
Melanie Linkous RN
Title: Lead Nurse

Woodford
Deborah Acker, Director
229 North Main Street
Versailles, Ky. 40383

DISTRICT HEALTH DEPARTMENT CONTACTS

Buffalo Trace

Jeni Gallenstein, RN
Buffalo Trace District Health Department

Purchase

Linda Cavitt
Phone: 270-753-3381

North Central

Beverly Aldridge
Phone: 502-633-1243

Department for Community Based Services
County Offices

DEPARTMENT FOR COMMUNITY BASED SERVICES COUNTY OFFICES

BARREN RIVER
Theresa Nelson 270/651-2250

Allen	237-3101
Barren	651-8396
Butler	526-3833
Edmonson	597-2163
Hart	524-7111
Logan	726-3516
Metcalfe	432-2721
Monroe	487-6701
Simpson	586-8266
Warren	746-7447

BIG SANDY
Susan Howard 606/789-6251

Floyd	886-8192
Johnson	886-8192
Magoffin	349-3123
Martin	298-7633
Pike	349-6131

BLUEGRASS SERVICE REGION (Rural)
Paul Whitman 859/839-6923

Anderson	839-5176
Bourbon	987-4655
Boyle	239-7105
Clark	737-7771
Estill	606/723-5146
Franklin	564-3540
Garrard	792-2186
Harrison	234-3884
Jessamine	885-9451
Lincoln	606/365-3551
Madison	986-8411
Mercer	734-5448
Nicholas	289-7123
Powell	606/663-2881
Richmond	623-1204
Scott	502/863-0565
Woodford	873-8041

CUMBERLAND VALLEY
Nancy Bean 606/864-6811

Bell	337-6171
Clay	598-2027
Harlan I	573-4620
Harlan II	573-6334
Jackson	287-7114
Knox	546-5154
Laurel I	878-6608
Laurel II	878-7060
Rockcastle	256-2138
Whitley	528-8833
Williamsburg	606/528-4234

FAYETTE
Paulette Best 859/245-2629

FIVCO

Larry Miller	**606/920-2007**
Boyd	920-2007
Carter	474-6627
Elliott	738-5157
Greenup	473-7366
Lawrence	638-4360

GATEWAY/BUFFALO

Sandy Adkins	**606/784-6687**
Bath	674-6308
Bracken	735-2195
Fleming	845-2381
Lewis	796-2981
Mason	564-6818
Menifee	768-2154
Montgomery	859/498-6312
Morgan	743-3158
Robertson	724-5413
Rowan	784-4178

GREEN RIVER

James Taylor	**270/687-7047**
Hancock	**927-8142**
Henderson	826-6203
McClean	486-3232
Ohio	274-8996
Union	389-2314
Webster	667-7043

JEFFERSON/KIPDA

Sandra Wilson	**502/595-4732**
Adult Intake	**595-4090**
CPS Intake	595-3216

KY RIVER

William Smith	**606/633-0922**
Breathitt	**666-7506**
Knott	785-3106
Lee	464-8801
Leslie	672-2313
Letcher	633-0191
Owsley	593-5191
Perry	435-6060
Wolfe	668-3101

KIDPA

Renee Sartin	**502/647-9245**
Bullitt	**955-6591**
Henry	845-2922
Oldham	222-9472
Shelby	633-1892
Spencer	502/477-8807
Trimble	255-3236

LAKE CUMBERLAND

Sandra Rollins	**606/677-4178**
Adair	270/384-4731
Casey	606/787-8386
Clinton	606/387-6655
Cumberland	270/864-3834

LINCOLN TRAIL

Vivian Hurt	**270/766-5029**
Breckinridge	756-2194
Grayson	259-3184
Hardin	766-5099
Larue	358-4175

Green	270/932-7485
McCreary	606/376-5365
Pulaski	270/677-4086
Russell	270/343-3512
Taylor	270/465-3549
Wayne	606/348-9361
Marion	692-3135
Meade	422-3942
Nelson	502/348-9048
Washington	859/336-0034

NORTHERN KY

Joel Griffin 859/292-6660

Boone	371-8832
Campbell	292-6733
Carroll	502/732-682
Gallatin	567-7381
Grant	824-4471
Kenton	292-6340
Owen	502/484-3937
Pendleton	654-3381

PENNYRILE

Sandra Lane 270/889-6547

Caldwell	365-7275
Christian	889-6503
Crittenden	965-5246
Hopkins	824-7566
Livingston	965-5246
Lyon	388-2146
Muhlenburg	388-3072
Todd	388-3072
Trigg	522-3451

PURCHASE

Renee Buckingham 270/247-2900

Ballard	335-5173
Calloway	753-5362
Carlisle	628-3434
Fulton	472-1850
Graves	270/247-4711
Hickman	653-4335
McCracken	575-7110
Marshall	527-1354

Summary

This report for 2000, is the most comprehensive collection of data since the Child Fatality Review System began. Almost half of Kentucky counties have local Child Fatality Review Teams. Is our glass, in Kentucky, half full or half empty? Looking at this question from a positive perspective, we have come a long way. Child Fatality review is not mandated to local communities. This means that those communities with teams are receiving services from dedicated people in their community who are volunteering time and effort to make Kentucky a better place to live.

If our glass is half full, Kentucky has a great number of individuals who care about the lives of children. We need a greater number of teams and more participation; however, we owe those currently participating in the process a big thank you. We made strides in improving the lives of children, but there is still room for improvement. There are accomplishments for this year; but there are also recommendations for improvements.

Perfecting this system will mean fewer children dying before the age of 18 in Kentucky. A goal that is both achievable and realistic is to make improvements to the system every year. The state team will work toward this goal for 2001.

References

References

Injury Prevention

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4. The Centers for Disease Control and Prevention. The National Institute for Occupa tional Safety and Health. (1999). A Training Packet for Safety.

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Unintentional Injury

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4. Motor Vehicle Accident Data. Kentucky State Police Statistics Branch. September, 2001.

All Terrain Vehicle

1. Statistical Data from Kentucky Vital Statistics

2. Kentucky Injury Prevention and Research Center

Drowning Fatalities

1. Christoffel, T., Gallagher, S. (1999) Injury Prevention and Public Health.

2. Brenner, R., Trumble, A., Smith, G., Kessler, P., Overpeck, M. (1995) Where Children Pediatrics 2001. Volume 108. Number 1.

Fire

1. Keep Your Family Safe: Fire Safety and Burn Prevention in the Home. (2000). American Academy of Pediatrics.

2. Centers for Disease Control and Prevention. (1996). Efforts to Increase Smoke Detector Use in U.S. Households. An Inventory Program.

Child Abuse and Neglect

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Infant Mortality

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Sudden Infant Death Syndrome

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